335587

THE

FAMILY DOCTOR

DESCRIBING THE

CAUSES, SYMPTOMS, AND TREATMENT

OF DISEASE.

WITH NUMEROUS ENGRAVINGS.

LONDON:

E. DIPPLE, HOLYWELL STREET, STRAND.

AND ALL BOOKSELLERS.

WELLCOME
LIBRARY
INSTITUTE

INDEX.

Ab cess, 266
Abstinence, 187, 195
Academy of Science, 51
Aloes, 263
Andral and the deaf and dumb, 4
Anecdotes, 7, 12, 38, 95
Animal food, properties of 84, 109
Ancle, dislocation of, 289
Apoplexy, 181
Arteries, the, 34

Bladder, inflammation of, 142
Blood, the circulation of, 1
Blood-letting, 66
Blood-letting, local, 81
Blood-letting, sequences of, 123
Blood, how to stop flow of, 114
Boarding-schools, 22
Body and mind, influence of 13
Branches, external carotid 145

Catarrh 25, 42, 60, 76, 307
Chilblains, 6
Chest, inflammation of 37, 58
Convalescence, how to discover, 259
Consumption, 267, 275
Colic, treatment of 293
Colic, 167
Cold water bathing, use of 205
Children, disease of 243
Children, precocious 53
Cigar-smoking, effects of 52
Charcoal, use of 78
Chinese Medical Jurisprudence, 119
Correspondents 14, 31, 47, 63, 78, 96, 111, 127, 143, 159, 175, 191, 208, 223, 239, 255, 271, 287, 303, 315

Daffy's elixir, 292
Deafness, 37
Diet, 292
Dropsy, 295
Diet, gelatinous 303
Dysentery, 201
Dropsy, Sir A. Cooper's remedy for cure of, 231
Disease, effects of 244
Diet, of disease in 248
Diseases, fashionable 59
Delirium Tremens, 88
Descantes, death of 91
Dropsy, 100
Death, hanging from 103
Deformity 108
Death, produced by &c. 110
Diarrhoea, 117

Earache, of the 277
Effeminacy 218
Erysipelas 20
Eye 273
Epilepsy 141
Exercise 211, 227

Fevers, intermittent 170
Fluids 311
Food 220, 231
Fœtid Breath 251

Giddiness 7
Gout, on the prevention of 298

Half vision 259
Heart, mechanism of 17
Hectic Fever 157
Health, &c. 70
Heart, the 97
Headache 126
Hernia, 134
Hospital Gangrene 206

Insanity 140, 124, 174
Intemperance, evils of 54
Immersion 285, 296

Joints, malformation of 257
Jaundice, treatment of 235

Kidneys, inflammation of 137

Lettsom and Brodum 169
Longevity 197

Madness, chances of curing 214
Medicines, on taking &c. 93
Milk, advantages of 93
Medical observations 4
Mothers Marks 264

Nature and Physic 90

Onions 158
Opium 63

Painters, effects of poison on &c. 39
Paris, Mysteries of 148
Pulse, Chinese mode of feeling 155
Piles, remedy for 185
Palsy, 233
Physicians, ignorance of 86
Pickles 116
Pimples, cure for 126
Poisoning 259
Painters' Colic
Passages 8, 24, 40, 56, 72, 104, 120, 136, 152, 168, 184, 216, 232
Pharmacy 5, 23, 45, 58, 71, 94, 102, 122, 135, 147, 173, 183, 203, 221, 238, 247, 265, 278, 300, 310

Review, 10, 28, 83, 106, 163, 252

Ringworm 294
Rheumatism, recipe for 166

Spine, distortions of 3
Science, academy of 35, 69
Sleeping 47
Salts 150
Spinal column, distortion of 161
Stomach, inflammation of 179
Sulphate of copper, use of 182
Seasons, 200
Sore eyes, 215
Sound, effects of 67
Superstition, 127
Skin, on diseases of 261

Teething, on 95
Tic Doloreux 279
Tea 501

Ulcers 62, 70, 91

Veins, the 49
Vein, inflammation of a 92
Vertebral column, distortion of 129

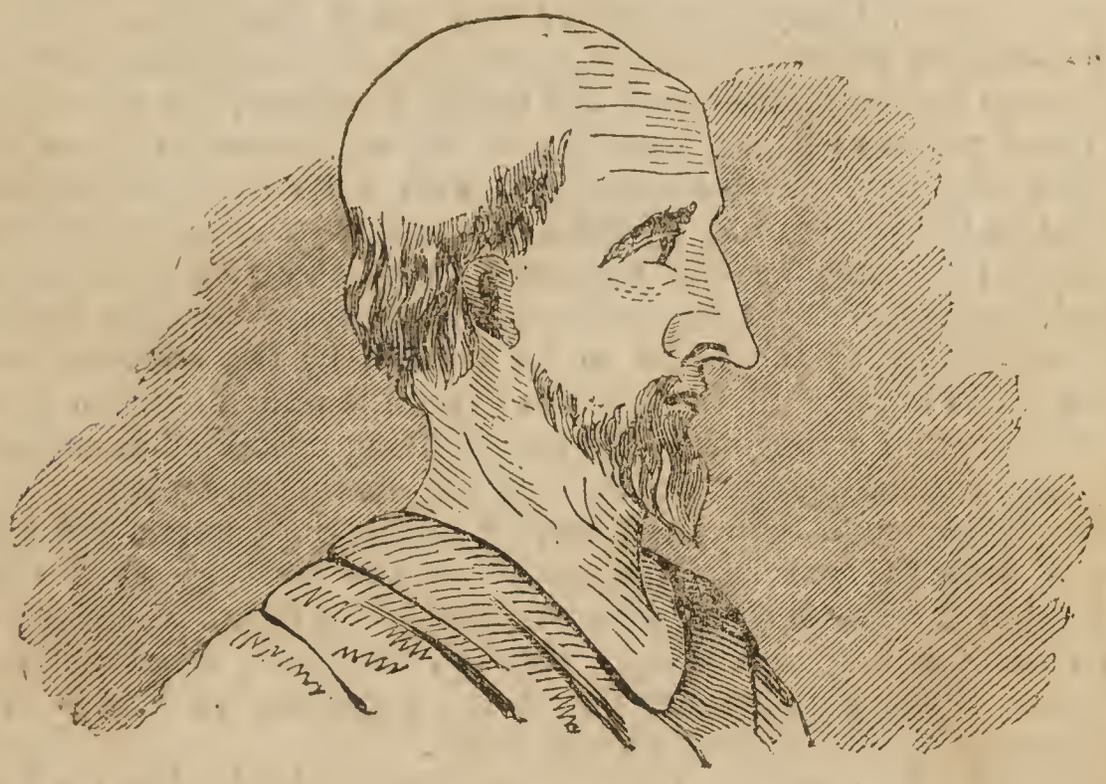
Whitlow, 12
War Physic 156
Weak Eyes, management of 202

THE

FAMILY DOCTOR.

ILLUSTRATED.

No. I.] JUNE 7, 1845. [Price 2*d*.



LIFE, PHILOSOPHY, AND WRITINGS OF HIPPOCRATES.

The appearance of Hippocrates forms one of the principal eras in the history of medicine. He is considered by many as the father of physic, in as far as he reduced it to science, and did more for medicine and surgery than all his predccessors.

He was born in the island of Cos; his father and grandfather were medical men. He found the medical science based on speculative theories, and the world divided between conflicting doctrines. He soon saw, however, that the art of healing required to be founded on observation, and on experience derived from nature.

Being bold and penetrating, he soon freed medicine of those fallacies which ignorance and superstition threw around it. He travelled a great deal for the sake of increasing his knowledge, and visited all parts of Greece; but he chiefly resided in Thessaly and Thrace. Little is known of his biography; and that is blended with fable. He seems, however, to have been universally esteemed for his philosophical acquirements, and high moral character. It is said he discovered love to be the destroying agency at work on the constitution of the son of Perdiccas, king of Macedon. He is even said to have averted an invasion of Cos, in consequence of the respect in which he was held by the Athenians. This is doubted; but Napoleon's army placed the same confidence in

Ambrose Paré. He received a golden crown during the plague of Athens. All these circumstances show the lofty position he occupied. His works, however, more than anything else, prove the merits and capacity of the writer. He taught that the speculative opinions of the schools were inapplicable to that animated machine, man's body, in its constantly varying condition from health to disease, from repletion to exhaustion. It required matured experience to note the changes; and though every physician might be a philosopher, every philosopher was not a physician. He acknowledges a general principle,—nature,—to whose operations he attributes the performance of the bodily functions, the restoration of those powers when diseased, and the regulation of the whole animal economy. These doctrines, with little modification, are taught in the present day by some of our most eminent physicians. He seems to have had an obscure idea of the circulation of the blood, and considered the arteries the receptacle of the animal spirits, conceiving the pulse to be created by two opposing currents. His account of the nervous system is undefined, but ingenious, although erroneous,—the nerves being described as engines, bending, extending, and contracting the members, which is certainly near enough their use; but he blends the tendons and ligaments with the nerves. He describes the anatomy of the ear well; but forms a singular idea of smell,—the brain, according to his notion, acting as a sponge through the nose, in drawing in odours. Sight he accounts for as the reflection of bodies in a transparent fluid distilled by small veins.

Digestion he considered as a concoction of the food in the heat of the stomach. The liver he describes as being the separator of the bile through the medium of the veins;—the spleen, as a spongy substance taking up part of the fluid swallowed;—the kidneys, as glands;—and the intestines as having only two divisions. He considered the brain the seat of understanding. In the management of diseases, Hippocrates relied a great deal on nature,—he considering disease as merely the effort of nature to remove something injurious from the system; and consequently, that his duty was only to assist her. He believed that contraries cured contraries: as cold overcoming heat,—fasting, repletion. During the crises and cure of diseases, he used laxatives and nauseating drink. In inflammation he used the lancet freely. His description of diseases, their causes and symptoms, is as accurate as in the present day. The certainty with which he foretold the termination of every complaint, rendered his book of aphorisms immortal. Hippocrates did not confine himself to internal diseases. He was a first-rate surgeon; and his maxim was, "when medicine fails, use the knife; and, after the knife, fire." He operated himself, boldly and with promptitude, performing all the operations common to the present age. By all accounts he was considered the prince of physicians; and his opinion was deemed oracular.

He was, however, impressed with a very small sense of his own merits, and declared that the practitioner of medicine who com-

mitted the fewest faults was the most to be admired. The world, notwithstanding, rang with his praise. The inhabitants of Argos voted him a statue of gold; and he was several times crowned by the Athenians. Temples were erected to his memory; and his altars were covered with offerings. All these things would not have occurred except to a person possessing the highest moral and intellectual excellence, being equally distinguished for his religious, moral, and philosophical greatness.

Hippocrates attained an extreme age,—some say ninety, others, one hundred and nine. He died at Larissa, in Thessaly, and was buried between that city and Gyrtona, where his sepulchre is still shown. A modern writer says of him, "Continuing to be studied by physicians, consulted by philosophers, and read by all men of taste, he is and always will be regarded as one of the most valuable monuments of science."—*Abridged from Moir's Outlines of Ancient Medicine.*

THINGS AS THEY ARE.

"My lady," said a footman, appearing at the drawing-room door of a splendid mansion in the west-end, "Dr. Sir Walter James."

"Ah, doctor! so glad you have called. What an attentive creature! I shall never forget it. Here is poor Louise:—she has had such a dreadful fit. Oh! I was frightened to death. It was horrible:—such agony I never witnessed: but indeed I ran away;—only, my maid says it continued a full quarter of an hour. The convulsions pulled its pretty face so! You see how it breathes; and what twitchings it has about the mouth, and that frightful foam."

"Your ladyship is quite right:—serious affection, very—tendency of blood to the cerebrum:—probably epilepsy. Let me see:—Confound the brute!"

"Has it bitten you, doctor? I am sure Louise would not bite. It is a very, very, very gentle creature; but it is ill, poor dear, darling pet! There now, doctor, I will hold it thus, and you just feel its pulse. Oh! it is only a scratch, doctor—nothing, I assure you."

"Your ladyship will excuse me: it is more than a scratch. It has teeth like lancets. What has it been eating?"

"Oh! nothing,—positively it will not eat a morsel. My maid tried it during lunch with the breast of a chicken; but the poor dear pet could not touch it, until I enticed it with some melted butter. I declare it would not touch its butter-toast this morning without sugar. That is a proof, I am sure, of the darling pet's delicate stomach."

"Has it caught cold?"

"I should not wonder; for, now I recollect, the window was open when it was washed this morning, and it coughed twice; and, oh lud! now I recollect it shuddered as it crept into my lap, poor darling, little love; and the water was nice and warm too, and had

some new milk in it to soften it, and honey-soap to make it pleasant. I positively will discharge John. What can you do, doctor?"

"Prescribe two grains of calomel and a little antimonial powder, just to restore the action of the skin."

"And how must I give it?"

"Conceal it in some sugar: I dare say it will eat sugar alone."

"Oh! dear no! What shall I do? I dare say some rice pudding and fresh cream—that will do. A thousand thanks, doctor. Be sure you look in again, doctor."

"Your ladyship's obedient."

[*Exit* the Doctor, with a couple of guineas.

"Doctor, well I thought as I would see you betimes, doctor," said a poor old bent down pauper, entering the surgery of ——— union workhouse, Yorkshire, where the apprentice and assistant of the medical attendant were performing duty:—"I have had sich a night: the rheumatiz has ta'en a' the power fro' my reet side, and thee knaus that th' oud complaint has returned, and——"

"You are an infernal bore, old Dickory: we can do nothing for you."

"But, lad, thee knaus that my side——"

"Oh! blister your side!"

"So thee has, man, and——"

"Give him a rousing dose of jalap, Tom. I wish it would settle the old snarler. Be off with you."

"Aye, but thee has na heerd a' my tale yet."

"Pound that mortar, Tom. Rattle away."

"I say, lad——"

"Stop, Tom. Here, take that blister, Tom. Where's the flies? Dust them all over. If that does not cure your rheumatism, you may go to ——."

"And where am I to put——"

"Put it over your mouth, if you like, or on your feet,—anywhere. I say, how long are you going to plague us?"

"Thee may be ou'd thesel' yet, lad, and may come to——"

"Walk your chalks, you old vagabond! Cut! Evaporate!—Ah! Susan! Come in, Susan! What's the matter? Tooth-ache? Such a pretty lass should never be troubled with tooth-ache. Soon cure you." [*Exit* Dickory, with a couple of death-warrants.

Cure for Sea Sickness.—A passenger on board one of the Gravesend boats writes us that he had for a fellow passenger, the other week, my Lord Mayor Gibbs. He states that the *wind was raised* and the water very rough in the *Long reach*, when forthwith the Lord Mayor, who is no sailor, began *casting up his accounts*, to the great astonishment of all on board! We do not believe a word of it, as no *accounts* of *any* description have as yet *reached* the parishioners of Wallbrook. We have long been of opinion that the best cure for that species of sea sickness is to become perpetual churchwarden of St. Stephens; and if that does not cure any man of *casting up his accounts*, we candidly confess we know no other.

FAMILY COMPLAINTS.

HEADACHES

Arise from various causes, but generally from derangements in the stomach and bowels. When the affection extends so far as throbbing in the temples, a feeling of weight at the opening in the head, giddiness, a disposition to sleep, with flushes of heat and shivering, the sooner the bowels are opened the better it will be for the person afflicted. We recommend four grains of extract of colocynth and two grains of calomel to be made into a pill, and taken at night. A wine glassful of the salts prepared as directed in one of the receipts given in this number should be taken in the morning, and repeated at noon.

A sick headache can be cured by mustard and warm water. In either case great care should be taken not to eat too heartily, as some folks do, immediately after the system is relieved.

HEARTBURN

Arises from indigestion, drinking, and over-feeding. The uncomfortable feeling of heat and acidity may be removed by chalk or carbonate of soda. Common liquorice juice has been recommended. Magnesia should be given to children in a little milk or water. We advise the removal of the cause, and a gentle purge, together with more exercise and greater attention to the rules of nature, which neither recommend inordinate eating for man, nor excessive drinking for children at the breast.

TEETHING.

The chief object is to remove the local irritation; and although great objection has been raised to the use of the lancet, there is little foundation for it except when the gums are cut too soon. But, when the membrane which imprisons the tooth is on the full stretch, and inflamed, lancing sets the tooth free, and relieves the inflammation by the bleeding,—the momentary pain being nothing compared with the constant uneasiness which the child suffers. Looseness of the bowels, and a great discharge of saliva, are favourable symptoms; and through these, nature is working to relieve herself. Sometimes there is much griping and violent purging, for which a little magnesia,—say a teaspoonful,—should be given. If the bowels are confined, the symptoms are more severe. There are spasms, heavy breathing, and sudden twitches about the mouth, and startings, with considerable oppression. A little castor oil should be given, or a few grains of the mixture of calomel and prepared chalk. The warm bath should instantly be resorted to in case of fits. If necessary, leeches and blisters may be applied with advantage behind the ears; but nothing is so important as to watch, before and during teething, the condition of the bowels. Children cannot speak: it is your duty to watch for them.

HOOPING COUGH.

Causes.—What is the cause of this complaint, which is so troublesome and often fatal to children? The invariable answer is, *contagion*. But what produced the first case? Some cause or other. True; and that cause would produce two cases or a thousand, whilst contagion would multiply these again. We have had the royal children attacked recently; and the court circular wonders how hooping cough gained the entrée of the palace. Has contagion anything to do with them? No. Still, had they been shut up in the ball of St. Paul's, the vulgar complaint might have attacked royal lungs, as well as plebeian. The fact appears to be, that atmospherical changes, particularly eastern winds, when not properly guarded against, are the most probable causes of hooping cough. Look at the present weather, and answer me what effect those changes, which irritate the mucous membrane of the lungs of grown-up people, and bring on a perfect paroxysm of coughing, must have on the very tender air passages of an infant? Irritation, inflammation, and hooping cough.

Symptoms.—Every one who has once heard the peculiar *kink*, will know it again.

A violent fit of coughing suddenly ensues, and continues until the child is sometimes exhausted: then a long breath is drawn in; but the sound is that of a crowing, wheezing, *kink*, *kink*, as if suffocation was about to take place, or as if the air was rushing through a narrow, parched, and contracted tube. The most violent efforts are made by the child; its face grows red, and even blue and deathly; phlegm is discharged, or the child vomits, and then becomes as cheerful and active as ever.

The approach of the disease may resemble that of a common cold. There is sometimes difficulty of breathing, great heat of skin, and a quick pulse; but most commonly nothing is suspected unless the disease is raging at the time, until the crowing kink proclaims the unwelcome visitor.

It may continue from two to eight weeks, and is most dangerous when it attacks infants, although adults are not exempt.

Treatment.—If there be a rattling breathing, and spasms accompanied with oppression, the child must be treated for inflammation of the lungs or air passages; and, if old enough, be bled at the arm; if too young, by leeches; whilst the antimonial wine, and calomel and antimonial powders in the proportion of two grains each, will be found beneficial. Leeches applied to the throat, and attention to the bowels, are most important; and nature will generally do the rest herself. The warm bath, above all things, when spasms are frequent, should be employed. Particular care should be taken to restrict children in food, as a full stomach is sure to bring on a violent attack. Rice and milk, sago, or arrowroot, will form the best diet. Even when the violence is over, attention to diet is important. Children should not be moved about much, or disturbed or irritated in any way. Care must be taken that no sudden change of temperature should occur; but

the heat of the room should be constant and moderate. There can be no doubt that change of air often puts an end to a lingering attack, and should be resorted to whenever it can be done with safety. A plaster of *gum galbanum*, applied to the chest, is highly spoken of, and may be usefully applied to the chest, especially during convalescence. Dr. Graves, of Dublin, speaks of a mixture he has employed with great success; but there is opium in it, and that should on no account be employed except by a medical man: although we can safely recommend, during recovery, compound tincture of bark, five ounces; camphorated mixture, one ounce; mix:—dose for an infant, half a teaspoonful; under five years, one teaspoonful, in barley-water, twice or three times a day. Never forget the *bowels*, *diet*, and *temperature*.

ANATOMY.

PRINCIPAL SEATS OF DISEASE.

The brain of man in a civilized state is often brought prematurely into action, is generally overwrought, and always subject to undue excitement. Hence those nervous affections which involve the system, more or less, in one general withering of the mental and physical capacity.

The lungs, constantly employed in pumping air out and in, too often convey impure supplies to the system, which always requires a constant amount of oxygen gas (one of its constituent parts) to carry on its healthy functions. Hence, through bigoted prejudices, we have the weakly and the gifted, the young sprouts and the old branches, swept away by lingering, painful and deceptive affections, of the lungs.

The brain may be overtaxed; the lungs distressed: still nature, in alarm, exclaims against any tricks in these important parts, and tries to correct the errors committed, on which we shall enlarge in our future columns. But it is in the stomach of man that nature seems most lenient; and her indulgence affords him an excuse for great irregularity. There, we are of opinion, an immense host of diseases have their true origin. The stomach is the cesspool of the system, into which all kinds of drinks are unmercifully poured. It is the receiver-general of all kinds of meats, which cookery has tortured into a thousand shapes, not to make food agreeable and easy of digestion, but to excite the delicate palate, to awaken the wearied taste, and flog the worn-out appetite of the gourmand, scourging tens of thousands from the table to the grave. The organs of digestion, their duties, their diseases, and above all, their mechanism, ought therefore to become a great and increasing study for all who value health above title, honour, fame, or money, which, without it, are like fruit on the shores of the dead sea of life,—beautiful to the eye but bitter as gall to the despairing invalid. The object of the succeeding wood-cut is to explain the nature, functions, form, and structure of the

stomach, without which all descriptions, however clear and simple, would convey only false and erroneous ideas :—

The stomach is a large membranous bag, lying under the lower ribs of the left side, and stretching across the hollow commonly called the pit of the stomach. It is muscular, and contracts and expands during digestion, creating a motion something like that of a worm when it crawls. The upper and smaller end is that by which the food enters from the gullet. The lower and larger one is that by which the food, when digested, passes into the intestines. The stomach consists of three coats or layers. The outer one is tough, smooth, and shining, and provided with a kind of oily mucous matter, to enable the stomach to move freely about. The middle coat is composed of fleshy fibres, one set running lengthwise,—another set in a circular direction : these give the stomach, by their contraction and extension, muscular power, enable it to decrease and enlarge its size, by turns, and also to press upon the food,—tossing, pressing, and rolling it backwards and forwards, something like the two hands churning water backwards and forwards, by their alternate pressure, in an India-rubber bag, or a bladder.

The inner coating is a smooth, irregular, rose-pink-looking membrane, thrown into folds very like the wrinkles one sees on the sand when the tide retires slowly, only not so marked in man, but equally irregular. This surface of the stomach, which is so important when we consider digestion, is studded with little grain-like bodies, from which oozes out the mucous matter, which, as it were, oils and protects its surface from irritation, and plays an important part in its functions. Nerves and blood-vessels cover the surface of the stomach, externally as well as internally, like a net, or the fibres we see in a leaf, when holding it up to the sun. The stomach receives a very large supply of blood from important vessels, which is increased or diminished according to its condition. When empty, the stomach is contracted and loose, like an empty

purse. When full, it is swelled out like the bag of a pair of bagpipes; and the circulation of the blood is active and abundant, making its internal surface red, like an inflamed eye. The arteries terminate on the inner surface of the stomach in the most minute hair-pointed-like dots, giving out a fluid secretion; whilst the veins in the same minute manner take up or suck in any fluid, and carry it into the system with a rapidity that easily accounts for support after milk or soup, or drunkenness, after brandy or gin.

The nerves which cover the stomach are the electro-telegraphic wires proceeding from the brain to this most important seat of man's pleasure and pain. These nerves soon announce the necessity for or presence of wholesome and agreeable food, or of improper or injurious matters. There is an exhilaration of spirits after a nutritive and temperate repast, as well as a sickly nauseous sensation after trashy meat or drink. Through the medium of those nerves, as in all other parts of the body, the functions of digestion are carried out in all their varied processes. In size the stomach varies in men as well as animals. In those who live on nutritious food, except gluttons, the stomach is not so large as in those who live on potatoes, porridge, or vegetable diet generally. But our object at present is chiefly to convey a general idea of what the stomach really is, to those who have formed no conception, save a wrong one, of its size, functions, or construction. It is necessary that such an important organ should be understood, before the important questions of diet and digestion are considered. When this explanation has been digested for a week, we shall proceed to impart more food to the reader of an interesting kind and instructive character.

SIR JAMES GRAHAM'S MEDICAL REFORM BILL.

The introduction of this new bill into parliament has created great consternation amongst physicians, surgeons, apothecaries, and quacks. From the College of Physicians down to Professor Holloway, and from the Apothecaries' Company even to the Old Field Lane Dog-Kennel, we have heard nothing, save opposition, objection, boasting, and lamentation. The parchment charters fairly shook with indignation, and the bottle-stoppers of Apothecaries' Hall bounced on the counter with a valorous precipitation, whilst the quack pill boxes rattled like mimic hail in a theatre. Amidst the hurricane no one seemed to think it at all necessary to consult the public patient, whilst the private doctors differed. We have undertaken the task of explaining to the public the real nature of the questions at issue between physic and themselves. The first question we ask is, whether medical reform be necessary or not? One great principle on which medical education has been hitherto based, is that of chartered monopoly. Certain colleges, such as the Royal Colleges of Physicians, London; of Physicians and Surgeons, Edinburgh; and of Physicians, Ireland; as well as the Apothecaries' Company, London; have all separate and pecu-

liar privileges of their own; each prescribes its own course of education for the students, imposes its fees, and grants its licenses and degrees to practise, having the power to prohibit any one from practising, unless duly authorised by them; the consequence has been an exclusive exercise of the right of teaching those who are afterwards to be the people's medical attendants. This monopoly generated indolence in the teachers, ignorance and consequent presumption in the taught, and money-getting being made one of the ends of the colleges, degrees have been purchased like an auctioneer's license. The public require a protection from that danger, and a future security against the corrupt practices of these corporations. A partial cure was effected by the private teachers who commenced on a free trade principle, and where the most talented had the best chance; but the charter stood in the way, and students were obliged to pay the fees of the college dull heads—at the same time that they had to steal off to the private teachers to acquire a thorough knowledge of their profession—that is an evil which cries aloud for redress. In practice, the results of the pernicious monopoly of teaching became more apparent, and much more serious.

In Edinburgh, that is to say, in the classes of the private teachers, as well as in London and Dublin (these men, be it observed, having no income save that which they earn by their talent alone), a first-rate surgical knowledge may be acquired at a reasonable rate of charges. Well: let a good surgeon pass his examination and commence practice in England: although he is perfectly qualified to practise his calling, he can be prosecuted by the company of apothecaries if he keep a shop and prescribe necessary medicine to the sick. He may cut off a leg with great dexterity and success. He may visit the sick-bed, and become eminent and useful; but, the moment he prescribes physic, down comes the Apothecaries' Company with its monopoly, and fines him, through a legal prosecution, for the performance of his important duties to mankind, for the exercise of his talent, and the earning of an honourable livelihood. He is persecuted and fined by a body of men who claim the privilege of exclusively selling physic over a planed piece of wood, behind which a man stands convicted of ignorance by the very act; for it is not at the counter but at the bed-side of the sick that the art of prescribing or giving medicine can possibly be acquired. And yet these dolts want protection—legal charters—protection for their ignorance from the British people. I should rather say from the English people; for neither the Scotch nor the Irish recognise such an absurd distinction—every medical man, as a matter agreeable to common sense, visiting his patients and selling or prescribing his own medicine. Now let us glance briefly at another consequence:—The people are shut out of colleges as much as they are out of France. The language employed there is foreign to them; the science taught there is unknown to them. How, then, if they are ignorant of French, can they possibly detect a mountebank when he pretends to speak French, high or low Dutch, or merely jabbers to them? How can the multitude decide, then, between the merits of a pro-

fessional man and a pretender, when the means of decision—a general knowledge of medicine, is totally and entirely beyond their comprehension? Is not quackery, then, a direct result of a monopoly in medical education and science? Do not the monopolists deserve the infliction? But ought not the people, for whom protection is alone wanted, to cry aloud against the enormity of suffering from either? Yet medical men cry aloud for protection—(shame on them!)—protection for the learned, the educated, the scholars! We ask it for the weak, the ignorant, the poor, who are decimated through licensed incapacity on the one hand, and quack butchery on the other. The medical men, or, at least, a portion of them, exclaim, "Our profession is being degraded,—lowered from its chartered privileges,—debased to a mechanical calling."—We shall answer this in our next.

GOBBLE AND GABBLE.

"Why don't you eat your breakfast, Gobble? I am sure the coffee is clear enough: it was ground before my face, that it was. They cannot take me in: that you know, Gobble. There! did you ever see such a rasher? Just look at the fat and the lean."

"I dare say it was starved one day, my dear, and fed the next, like the Irishman's pig."

"Eat it, Gobble, and don't show your ignorance. I know how pigs are fed, Gobble. There, now, I have broken your egg for you. Just look at the freshness—you wont eat it?"

"I can't, my dear! That Welsh-rabbit I had at the Three Tuns has fairly turned my stomach."

"Serves you right, for eating out of your own house, Gobble. But it was not the Welsh-rabbit, Gobble:—that I know. A Welsh-rabbit doesn't make folks drunk, Gobble. You always blame the Welsh-rabbit, Gobble; but I know better than that."

"You know, my dear, it always makes me ill."

"Then why do you eat them, Gobble? Are you forced to do it? Does any one give you them for nothing? No, indeed, Gobble: a Welsh-rabbit would not cost seven or eight shillings; and if you spent a penny, Gobble, you spent that; for I counted the money in your pocket, Gobble."

"Lord! how my head aches!"

"Serves you right, Gobble!—a pretty thing, indeed, to buy a head-ache for eight shillings, when you might have got little Tom and our darling Mary a pair of shoes each! But *I'll* spend the money, too, Gobble! You'll see if I don't. Eight shillings, indeed! and to make a beast of yourself as you did! I wonder, Gobble!"

"I didn't spend eight shillings, my dear. I had a Welsh-rabbit and a couple of pints:—that was all."

"Come, come, Gobble, I know what these cost: and would a couple of pints make such a mess as you did? Really, Gobble,

you set a pretty example to your children. There was little Tom, rolling about, as you did last night, saying, 'Papa drunk! papa drunk!' Why, the whole neighbourhood must have heard you coming home."

"Well, well, I tell you I did *not* spend eight shillings."

"Do you think, Gobble, I did not know what money you had?"

"No: you could not, my dear."

"Did you not wash and clean yourself when you came home? and was there not a button loose? and didn't I feel in your pocket?"

"Oh! I daresay I treated some one. There was my smoking too—I positively will give it up—it affects me so much. Now I remember, I did treat a friend."

"I dare say you did, Gobble. I see clear enough how your money goes, Gobble. But, as I'm an injured woman, I'll submit to it no longer. You go and treat your female friends, do you? instead of looking to your wife and family; and then come home here with a policeman on each side of you—perfectly helpless, as I'm an honest woman."

"I daresay they took the money out of my pocket."

"You daresay! I wonder how you dare sit there and talk so easily about it!"

"You are used to it, my dear."

"But I'll be used to it no longer, Gobble. I wonder you have not more of the spirit of a man about you, and the sense of a father. Look at your children, Gobble, and look at me. Why, I'm a perfect fright."

"I know it, my dear."

"You're a brute, Gobble,—that you are. You care for no one but your drunken companions at the Three Tuns. Oh! I wish you men saw yourselves as your poor wives have to do. Look at yourself, now. Go to the glass. Why, your clothes are all huddled on, and your hair tumbled, and your eyes red. Why, what are you good for now? Tell me that, Gobble. Good for nothing but dozing and grumbling like a bear with the tooth-ache. Oh! what a blessed thing it is that drink does punish you men. The Lord have mercy on the women if it did no more harm next morning than water overnight."

"It's bad enough, my dear: but I will put the break on for the next six months. I really suffer so much, I must do it, or——"

"And who would believe you, Gobble? Did you not say you were coming back in a minute?—you would only have a single pint and a pipe; and I, simple woman, believed you, and got your supper ready; and a pretty state you were in when you came. They put you against the door like a sack of coals; and I thought, when I heard the knock and the feet on the steps, you were coming in sober with my brother Will or your uncle;—when in you rolled, the moment the door was opened, and nearly knocked me down."

"Well, well, my dear! say no more about it. You see Tom is listening to every word, and that is a bad example for children."

"The Lord have mercy on me, you *are* a pretty parson to preach

about a good example! But it will soon come to an end, Gobble: you'll lose your place; or get yourself lamed; or have your neck broken; or have a fit, Gobble; for you know the doctor told you you were apoplectic."

"Well, well, my dear, I'll give up the Welsh-rabbit. I never get the least touched if I keep off the Welsh-rabbit and the pipe. Oh! I'll admit that:—I don't deny that I like both rather too well."

"The old tale, Gobble,—the old tale. There's your companion Jenkins:—that man always gets drunk on pickled onions."

"Well, my dear, he has a tender stomach.

"Let him hold less to his head. If you, Gobble, would keep your hand oftener from your head it would be better for you,—for all of us,—and more creditable."

"I don't think the coffee agrees with me, my dear; it gets acid on my stomach; I wish you would just step over to the Three Tuns, my dear, and bring a noggin of their gin and bitters."

"I'll do no such thing, Gobble."

"Send Tom."

"No indeed, Gobble, my son shall not follow his father's steps; besides, it is service time. And there's the rent and taxes due, Gobble: and new summer things are wanted for all of us."

"A small drop will do no harm. I may as well be hanged for a ton as an ounce:—a hair of the dog that bit me——"

"Will never cure you of your madness, Gobble. We'll have the doctor next, and nothing to pay him with. Well, I'm sick of this life,—that I am. If ever Mary marries a drunkard, it won't be whilst I am alive."

"I positively will keep the steam down, my dear. Let me see: there, I have a sovereign in my watch fob: you did not find that out."

"But I will next time, Gobble:—well!"

"Just go over the way and get me a thimbleful. I dare say you will like a drop yourself,—I know you do of something very, very good."

"Me, Gobble,—me! Why, I never taste a drop from week's end to week's end. You drink for all of us, Gobble; and you'll drink us to the door."

"A small drop, my dear:—it shall be the last. You may keep the change: I won't touch another drop."

"You won't, Gobble?—are you sure you won't break your promise? Well, I suppose I must,—only for this time, though."

"That's a dear: I must get rid of that cursed rabbit, and take the taste of that infernal tobacco out of my mouth:—I'll cut them. As for drinking, I am a most temperate man,—none more so."

"Heigh ho! Gobble."

DR. BAILLIE

Listened to a prosing account of a lady who was so little indisposed as to propose going to the Opera that evening. He escaped down stairs, but was again sent for and asked if she might eat oysters on her return. "*Yes, madam, shells and all, if you like!*"

RECEIPTS FOR THE HOUSEHOLD.

CAPITAL MEDICINE FOR THE SUMMER SEASON.

When affected with slight fever, and a feeling of internal heat, and dryness of skin, generally produced by disorders of the bowels at this season, take the following medicine:—Two ounces of salts, half an ounce of cream of tartar; dissolve in one quart of warm water; throw in a rind of lemon peel to flavour the mixture; and take one wine glassful in the morning *before* breakfast.

POP.

Sugar, one pound; cream of tartar, one ounce; ginger, half an ounce; water, one gallon, old measure, boiling. Pour the water on the ingredients; then add the juice and rind of two lemons. Stir into the liquor two table-spoonfuls of yeast; and when quite cold, bottle and cork well, and in twenty-four hours it is ripe for use.

First-rate ginger-beer in our next: receipt, worth one guinea.

TOOTHACHE.

Dr. Blake recommends two drachms of alum to be dissolved in seven drachms of sweet spirits of nitre; a piece of lint or a small bit of sponge to be dipped in the solution and applied to the tooth.

CONTAGION FROM FEVERS.

Sir William Temple recommends timid people to put a small piece of myrrh in the mouth in all cases of danger. It has proved effectual during the plagues of the east.

POISONOUS FISH.—MUSSELS.

In June, 1827, about thirty persons were seized at Leith with similar symptoms from eating mussels,—heat and thirst, strong desire to pass the urine, small weak pulse, difficulty in swallowing, twitching, and great weakness. Two aged persons died. Emetics and purgatives, followed by stimulants, relieved the remainder. On dissecting the dead, the intestines were much inflamed. These mussels were collected from a bar at the dock gates. The fish seemed healthy, and no trace of poison in them could be discovered: therefore the noxious property must have been natural to them.

Remedy.—If such symptoms appear within an hour after eating the fish, the readiest emetic is warm water and mustard. If after several hours, then a strong purgative should be given; and if there is any sinking, a few drops of sulphuric ether should be given in sugar, or brandy and water.

In 1833, a man died in London after eating a pint of mussels for supper.

MONTESQUIEU,

When disputing with a counsellor of the Parliament of Bordeaux, who was very talented but violent, the latter warmly exclaimed,—"Sir, if I am not right, I offer you my head."—"Accepted," said the philosopher: "trifling presents preserve friendship."

INVALIDS' CORNER.

"Amusement is conducive to the restoration of health."

THE POISONER.

In 1658, the street Neuve St. Paul, in the Marais, at Paris, was even more lugubrious that it is in the present day. It was formed of solidly-built hotels, and inhabited chiefly by the aristocracy. This street was no thoroughfare, and consequently was perfectly tranquil, having likewise the advantage of being in the centre of places of assembly, promenades, and pleasure. Entering the street, you perceived on the right an hotel larger and richer in appearance than the others, recently built and ornamented with statues. It was the dwelling of M. d'Aubray, civil lieutenant of the city of Paris. The entrance to the house was by a sculptured gate or carriage-way, and thence by a flight of stone steps to the first-floor. It would be necessary to see one of those apartments of the seventeenth century, to be able to comprehend their immensity and grandeur.

M. d'Aubray's was ornamented by paintings of the battles of Charles VII., Francis I., and Henry IV.; full length portraits of the kings of France, mayors, constables, and provosts, also maps and plans of provinces, and of the city of Paris. From this immense anti-chamber you had to pass through large chambers, until you reached a small saloon, or ladies' bower, extremely neat, and adorned with carved furniture, mirrors, gildings, tapestry, and valuable paintings. Whoever, at the moment of which we speak, had entered the saloon, would have been struck by the attitude of two young females seated before the fire-place. The one who was turned more towards the door, might be about twenty-five. She was small, delicate, and pale. She sat in a large arm-chair, having a gilded back; her head supported on a hand of delicate whiteness. Her dark hair fell in ringlets over a lace collar connected with a white satin dress, open in front, and ornamented with red and blue rosettes. From the waist were suspended a gold watch and a medal, supported by gold chains. The half averted face expressed the most profound grief; whilst from her eyes, which were cast upon the ground, rushed torrents of tears.

The lady who faced the window was older by at least five years, and taller. She was dressed in the sombre garments of a sister of charity. Her calm and noble countenance, so full of softness, nevertheless bore the marks of much suffering. Seated in one of those large arm-chairs, whose back was upon a decline, she looked fixedly at the young woman before her, as if to read her thoughts and interpret them from her gestures. A profound silence reigned in the apartment, which was only disturbed by the crackling of the fire and the measured sound of a magnificent clock.

This sad tranquillity was prolonged during several minutes; when the sister spoke in a tone of angelic softness:—"Marguerite, what is this secret? You know that I have always been your faithful companion and devoted friend."

"Yes, sister; but I fear you will not be so indulgent as you have been. Your counsels will not relieve my mind, or your pardon restore to me that repose and happiness which I have lost."

Her voice became feeble and agonised.

"God is great and good, sister: confide in him."

These simple words, uttered in a solemn manner by Sister Marie, were completely successful; and the penitent thus began:—

"About seven years ago, you remember that I reached my sixteenth year. Our father, M. Dreux d'Aubray came to see me at the convent, and announced with more than his usual kindness of manner my approaching marriage with the Marquis de Brinvilliers, colonel of the Normandy regiment.

"I know all that," interrupted Marie: "and several days after the interview you became the pretty little Marchioness de Brinvilliers, as Mazarin then called you."

"Would to God I had never been so!" exclaimed Marguerite, whom we shall in future call the Marchioness de Brinvilliers. Then approaching her sister, she continued:—

"At sixteen years of age, I did not know that any other sentiment existed under heaven save that of friendship. I loved my companions as sisters: I divided with them the moments I could spare from my study: I was happy. In a moment, this peaceable life changed for ever. I left the convent and I became, from obedience, not from love, the wife of the Marquis de Brinvilliers. What is more frightful, sister—my husband did not love me. He only married me for the sake of the £8,000 or £9,000 I brought him as my portion. Well: shall I confess it? During four years I did not suffer much from his cruel indifference. I loved not; and I was not beloved."

She paused to subdue her emotion.

"Five years after my marriage,—that is to say, in 1656, the disorders created by the pages and lacqueys increased every day in Paris. Those valets were not content with fighting with each other; they robbed the merchants, insulted females, smashed the windows, disturbed the proceedings of the legal tribunals, rescued the condemned from the scaffold, and engaged in sanguinary contests with the provosts' archers. At this time my husband was absent with his regiment, serving under Turenne against the Spanish troops commanded by Condé. You, sister, were in Italy; and I inhabited my country house at Picpus.

(To be continued.)

NOTICE.

Advice will be given gratuitously to all Subscribers. Address to the Editor, marked private.

THE

FAMILY DOCTOR.

ILLUSTRATED.

No. II.] JUNE 14, 1845. [PRICE 2 *d*

CLAUDIUS GALEN.

CLAUDIUS GALEN was born at Pergamus, in Asia Minor, in the 131st year of the Christian era. His father, by profession an architect, is represented to have been a person of high moral character, active habits, and cultivated mind.

The penetration of the father soon perceived in his son the seeds of that promise, which time afterwards so gloriously matured.

A fortunate whim determined the father to direct the attention of his son to medicine; and he commenced the study of anatomy under Satyrus, a person of ability. By Stratonicus, a dogmatist, and Æschiron, a empiric, he was intitated into the principles of their respective systems. When young Galen was in his tweny-first year, his excellent father died, and he left Pergamus to attend the lectures of Pelops, and of the Platonist Ultimus at Smyrna. From thence he proceeded to Corinth, where, after for some time studying the philosophical doctrines of Numesianus, who was resident there, he prepared himself for travel, principally with a view of extending his knowledge of natural history. Alexandria being at that time the

centre of the scientific world, Galen determined to perfect his anatomical knowledge at that place, and from his other preceptors singled out Heracliamus, as the one more pre-eminently intitled to his eulogy and gratitude.

At the age of twenty-eight, Galen revisited his native soil, and was intrusted with the charge of the gymnasium attached to one of the temples of Esculapius. While in this somewhat obscure employment, a revolution, which shortly afterwards broke out at Pergamus, fortunately for his fame, compelled him to quit that city, and caused him to bend his eyes on Rome, from the encouragement and patronage held out there to the Greek practitioners of medicine.

Almost immediately after his settlement at Rome, which was in his thirty-fourth year, his accurate anatomical knowledge, and the general success of his practice, drew at once upon him the attention of the public and the jealousy of all the Roman physicians. So high against him had the tide of professional rancour and malignity ascended, partly, no doubt, from mean and unworthy jealousy of excelling merit, and partly, it is feared, from the uncompromising and arbitrary tone which Galen ever maintained to all opposition, he, on the breaking out of a malignant epidemic, withdrew in disgust from the city, and re-embarked for Greece.

Scarcely, however, had one year elapsed, ere he was recalled by the Emperor Marcus Aurelius, who was at that time at Aquitain prosecuting the war against the Murcomania and the other German nations; where, shortly afterwards, he was appointed physician to the young Emperor, Commodus, with whom he justly became a great favourite, as well as with the whole court, not only for his splendid professional knowledge, but for his worth and virtues.

Some authors have asserted, that from a conviction of the truth of the miracles performed by our Saviour, he had embraced Christianity, and died while on a journey to Judea.

EXPLOSIONS IN COAL MINES.

Effectual Means of Removing Fire and Choke Damp.

The vast importance of our coal mines, in a national, commercial, and manufacturing point of view, renders everything connected with their safe and effectual working most important to the British public. The enterprise and handicraft of our miners have, of late years, given such a stimulus to all commercial transactions, and have afforded such cheap and abundant supplies to our manufacturies, as well as to our firesides, that they have assumed a prominent position in civilized society. The mining class are so closely allied with our greatness as a nation, our advancement as a people, and our position in art, science, and trade, that we consider ourselves called upon to direct an earnest and undivided attention to the dangers which surround their calling. We have many claims upon our space as far as regards working men, and the effects produced upon their health by their various pursuits; but none can have a higher claim upon, or

possess a better right to our advocacy, than the miners. Humanity and justice require that their case should be brought as early as possible before our readers, more especially as, in their peculiar trade, the most common dangers which beset it are concealed from the public eye; nor has the public yet become sufficiently aware of the colliers' risks, pains, and penalties, to make itself a party to their cause.

To prove the magnitude of the case, as far as regards the safety and protection of one of the most important branches of industry, we will direct attention, in the first place, to the awful sacrifice of life in coal mines, and then point out the causes of those repeated and fatal accidents, as well as the remedies to be employed to avert all future calamities of the kind.

In 1835, a select committee of the House of Commons published in its report on accidents in mines, a list of persons who had suffered on account of accidents in mines, leaving out Northumberland and Durham: though very incorrectly drawn up, it shows that from 1810 to the date of the report, one thousand one hundred and twenty-five lives were lost. This number, added to the general and imperfect returns, the committee states, makes the number of fatal accidents, within twenty-five years, amount to two thousand and venty! These are terrific facts, to be believed on the authority of the House of Commons, and most forcibly appeal to the humanity of every member of our community.

I wish to direct attention next to the kind of accidents which are mostly fatal; and to enable me to do that, I take up the list of accidents which have occurred in the Northumberland and Durham mines alone. From 1658 until 1844, being a period of 186 years, I find that 188 accidents have occurred, through which two thousand and fifty human beings perished; 129 explosions took place, killing 1,822 persons; seven inundations, drowning ninety-six persons; five cases of choke damp (carbonic acid gas) occurred, destroying eighteen individuals; and forty-seven accidents of various kinds, from the bursting of a boiler to the falling of a stone, killing 114 miners.

It will be seen from these statistics that the chief source of distruction arises from explosion—the great scourge has been fire-damp or hydrogen gas. In many instances the loss of life has been awful. I find that 102 persons lost their lives at one time, by one explosion, at Wallsend, on June 18th, 1835; other cases occur, of ninety sufferers, and of eighty, seventy-five, and fifty-nine: and we had the explosion recently at Haswell, whereby ninety-five persons perished at one fell swoop. This monster cause must be examined into, and the means pointed out for its removal. The reader, to understand the principle upon which we would proceed, must clearly comprehend the working of a mine, the dangers which arise, and the best means of removing the causes altogether.

With respect to the mode of working one of the best mines in the present day, we cannot do better than refer to the published

account of the explosion at Haswell Colliery, as related by W. P. Roberts, Esq., solicitor, a gentleman who has devoted much attention to the subject, and who exhibited much humanity and judgement on that occasion.

In all mines, but particularly in deep ones, by the working of coal there are evolved two gases, which are both of them, in a pure state, fatal to all animals, when breathed. The one is hydrogen, or, more properly speaking, carburetted hydrogen; the other is carbonic acid gas. The first destroyes by exploding; and, before it can explode, it must have atmospherical air present. The second destroys when it is inhaled. Hydrogen is at least, speaking roundly, fifteen or sixteen times lighter than common air, and consequently rises to the roof. Carbonic acid gas is more than twice the weight of common air, and hence it falls to the ground. Sometimes both are present; the one at the roof of the mine gallery, the other on the floor, a sheeting of atmospherical air being between them. If the miner applied the light of a naked candle to the roof, the hydrogen would be fired: if he put it on the floor, the light would be extinguished. In the one case he would be scorched, in the other suffocated. It seems, from all I have seen and know on the question, that the stagnation and consequent decomposition of water, when coal is placed in contact with it, becomes the cause of the formation of these distructive gases. In fact, I saw a mine in Scotland which had a drain or tunnel driven beneath the coal workings; and, the mine being thus naturally and constantly drained, no collection of gases ensued: no Davy lamps were employed, nor were any explosions ever heard of. That mine was in the neighbourhood of Sanquhar. Such a process in very deep mines cannot be adopted; but the engine is employed to pump out the water, and atmospherical air is caused to circulate through the mine by artificial means. so as to ventilate it, and neutralise the fatal fire-damp, or hydrogen, which the miners so term, because after an explosion of hydrogen, water is formed, and the dead appear as if drenched all over.

It would be difficult to make the reader clearly understand how the workings of a mine are ventilated without a drawing; but we shall endeavour to make it as plain as possible. Let a bed of coal be supposed to exist under the soil: a shaft or mine would be sunk to reach it. The earth being displaced, the internal springs will tend to fill it up. By pumping and sinking, the required depth is reached, and an engine discharges the water, at the same time as it lifts up the coal in cages or large baskets. The air will necessarily penetrate to the farthest cutting; but it would stagnate there, just as in a well, and become foul, if a current could not be produced.

To create a current, a second shaft is generally sunk, at some distance from the first, at the bottom of which a fire is kindled; so that a stream of air may be heated and carried up exactly as in a chimney. Open the door, we have a draught. So it is in a mine; the air descends by the greatest shaft, called the down-cast, or down-draught, and after circulating in the mine, it discharges itself by the

up-cast, or up-draught shaft, having the fire to assist it in its speed. Now, we all know that if any communication exists between the two shafts or pipes stuck in the ground, the air would if heated at one side, rush to supply the tendency to a vacuum, and would by the nearest way get to the fire at the bottom of the upright shaft. Sink two chimenys in the ground, and light a fire at the bottom of one, having an underground tunnel communicating with the other, and the air would, as a matter of course, go down the chimeny without a fire, in a stream, and rush out by the chimeny that had one, also in a stream, creating a current through the tunnel beneath.

Now, a coal mine may be coupared to a draught-board extending underground; the squares being coal, and the lines, passages on every side. Put a cork on each square, and a board over all, and you have the pillars and ways, workings and roads of a mine before your eyes, making allowance always for the difference in the width of the passages around your square pillars of coal. Now the question is, when all these roads are cut out, and the coal taken from each cutting is arrived at the surface, how can the ventilation of the mine be affected?

(To be continued.)

DR. PARIS ON SUPPER.

In the time of Elizabeth the nobility and gentry were accustomed to dine at eleven o'clock, sup between five and six, and go to bed at ten. It is therefore evident that any argument founded on the healthy condition of our ancestors, and brought in support of this meal (supper) must be fallacious. By supper in modern times, we understand a late meal just before bed-time; but, as sleep is not favourable to every stage of digestion, it is very questionable whether retiring to bed with a full stomach can under any circumstances be salutary. During the first part of digestion, that of the formation of chyme, a person may, perhaps, sleep quietly, if the extension of the stomach does not cause distress by impeding respiration. When the food has passed out of the atomach. and the process of making chyle, and then blood, have been established. the body then becomes predisposed to activity. The sleeper generally awakes at this period, and remains in a feverish state during several hours. On this general principle suppers should be avided,—that is to say, hearty suppers, which require the whole powers of the stomach to digest them. the same objection does not apply to light repasts, such as an egg lightly boiled, with a piece of dry toast and a glass of port wine negus. Invalids often bribe the stomach in that way, before they can secure a night's rest. Business men are all in favour of suppers —the convivial hour, and absence of calls, predisposing to enjoyment. Healthy persons may occasionally indulge in suppers; but the general practice cannot be admitted, especially with invalids. The hilarity felt in the evening is produced by the newly-created blood of the previous meal, and must not be taken as the signal for a new repast.

FAMILY COMPLAINTS.

Hoarseness is so common at all seasons, and so many persons are afflicted with it, that we consider a few observations necessary on that subject. Generally speaking, hoarseness arises from damp feet, sitting in wet clothes, or upon iron seats or stones, as well as exposure to draughts of air. The cause is, mostly, relaxation in the mechanical structure of the organs of the voice, the parts becoming loose, like the strings of a harp when out of tune. Sometimes there is a good deal of inflammation, which makes the lining membrane of the air tubes dry, and the voice husky. Singers, public speakers, and actors, are often afflicted by the latter affection, which is removed by gum arabic, liquorice-juice, a little syrup of squills, or even the yolk of an egg beat up in brandy, with cayenne pepper. When the parts are relaxed, and no dryness is felt in the throat, we have found port-wine to be an excellent gargle; so is alum; and, above all cayenne-lozenges. When the hoarseness and loss of voice resist every one of these applications, we have known leeches to effect a cure. Tartaric acid is a safe and effectual astringent, often used previous to singing,

Worms.—The symptoms which announce worms are generally emaciation of the child's body, attended with a voracious appetite, a flushed cheek; sometimes one, sometimes both; grinding the teeth during sleep, picking the nose, and irritation at the seat. The stools are slimy and irregular, with griping pains. Frequently with tape-worm, fits are brought on, The symptoms of worms are, however, common to affections of the brain and inflamation of the bowels; and the best test is perceiving the presence of worms themselves. Children have the small dent worms, which may easily be ejected by a small dose of jalap, or an injection of turpentine and gruel, or olive-oil alone, The large round worms, something like earth ones, are generally common with people who live on meal porridge, vegetables milk, and cheese, especially if the season has been variable and wet. To expel them, children require ten grains of jalap and three of calomel; males, about fifteen grains, or even twenty grains of jalap and three or four of calomel, Tape-wormsis are effectually removed, by oil of turpentine. A man should take at least one ounce, twice a day. When purging ensues, the worm frequently comes away whole. There can be no question that people who are enabled to live on good animal food, know nothing of this affiiction. Children, and the poor, are mostly subject to them; and in both cases, the evil rests with the mproper diet, they receive. We shall return to this subject.

Burns.—The moment the accident occurs, the limb should be plunged into very cold water and kept there during one or two hours, care being taken that the water is changed as often as it becomes heated. When the member is withdrawn from the water, a piece of linen rag should be spread over the part injured, and kept constantly wet, the compress being changed every few minutes; then soaked in water and put on again. Two compresses are best,—one to be boil

ing in the water, whilst the other is on the burn. Ether is a capital thing when mixed with the water,—a tablespoonful being sufficient for a basin of water. In the absence of ether, gin will answer the purpose equally well. It must be observed, that women, under certain circumstances, must not, in cases of burns, plunge their limbs into cold water, but use wet clothes, as directed above. The scrapings of raw potatoes are very cooling and useful when spread over the burned part and renewed often, like the compresses, It has been discovered some years ago that cotton wadding, rolled round the part burned, is very efficaious. Common writing ink is used for the purpose of curing the wound; but the following pommade is better:—take of olive oil, one ounce and a half; white wax, half an ounce: melt and mix well together: spread the ointment and apply to the part affected.

USEFUL RECEIPTS.

Dry Cough.—Take half an ounce of powdered gum arabic and the same quantity of common licquorice juice; dissolve in a gill of warm water, pouring it first on the powdered gum, as if mixing flower for paste; squeeze the juice of a lemon into the cool liquor: then add two drachms of peregoric elixir, and one drachm of syrup of squills; cork all up in a bottle: shake it; and take a tablespoonful when the cough is troublesome.

Gravel.—Take one drachm of Venice turpentine, one drachm of castile soap one drachm of powdered rhubarb, and one drachm of extract of cascarilla: add thirty drops of the essential oil of juniper: mix all well together; and then divide into fourty-eight pills. Take two or three,night and morning.

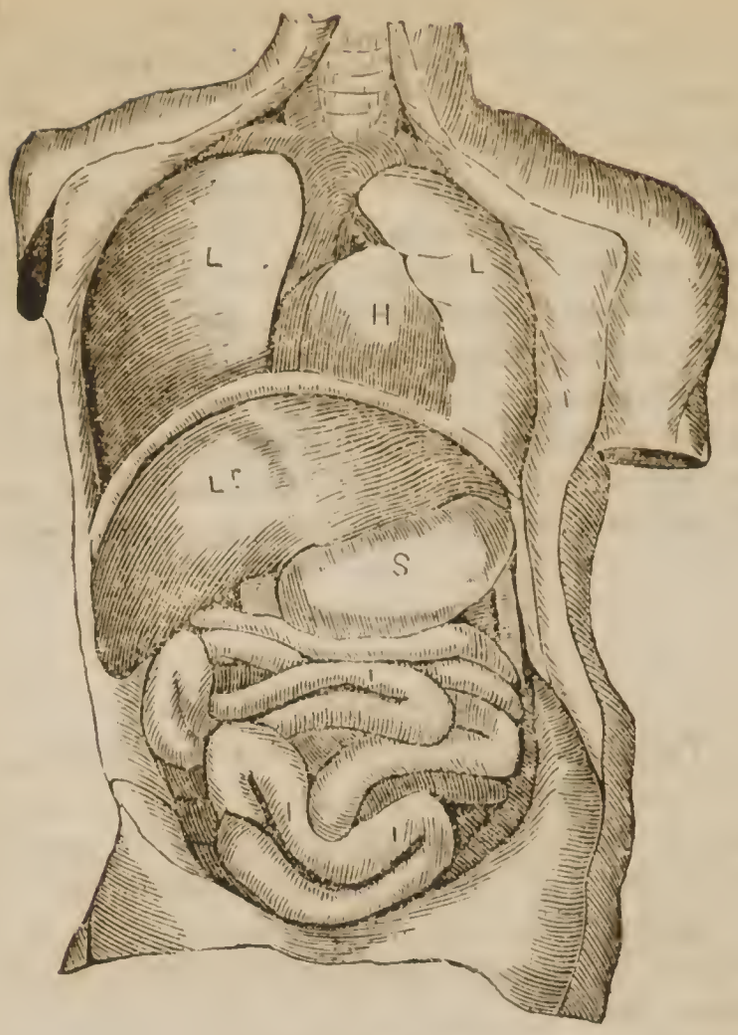
Old Standing Rheumatism.—Dr. Gooch's remedy, is one drachm of volatile tincture of gum guaiacum, three times a-day, in a glass of white wine.

Corns.—a remedy strongly recommended is, chalk scrapings mixed with vinegar.

Sprain.—Plunge the foot and ankle instantly into cold water. It is effectual and certain in its operation. If the swelling continues, spread lint dipped in a mixture of brandy and the white of eggs, over the whole foot. It will be advantageous to put over the lint a few raspings or parings of soap.

Superior Ginger Beer,—Take of the best powdered ginger, two ounces: white sugar, two pounds; isinglass, half an ounce; und three lemons; add a tablespoonful of good yeast to three gallons (old measure) of spring water.

A Painter, who turned Physician, was told,—"Sir, you have done well this time. Formerly the faults of your works were seen: now the earth conceals them."



ANATOMY.

The construction of the human system the laws which regulate its functions, and the rules by which man should be guided in the preservation of his health, are so little known, comrpehended, or followed, that we undertake as a duty and a pleasure the task of conveying, to the understanding, by the simplest method, a sound knowledge on these important questions. A plant growing on the mountain, an animal roving through the forest, or a bird flying in the air, have each and every one few wants to supply and few duties to perform. The first is rooted to its food; the second tramples over it and amidst it; while the last discovers nourishment in the seedy plants and abounding fruit trees. How different is man, situated in civilized society. The uniformity of nature gives place to the ever varying events of artificial society,—simple food to the multitudinous dishes,—and the limited cares of nature to the absoring and exciting pursuits of trade and commerce. Experience may regulate the first state of existence; but knowledge and education can only direct the last. Nature, it is true, accomodates herself wonderfully to man's altered and altering condition; but she nevertheless draws a line of living beyond which she forbids her offspring to pass, except under penalties which condemn them to dread and direful affiictions, both physical and mental. Our aim is to convey useful knowledge, by which the numerous sufferings of man may be averted. How few discover, until fairly stricken down, the meaning of the many warnings which watchful nature throws

out so profusely to her flock, when any of them wander into dangerous or obnoxious habits.

Still the landmarks of nature are clear and simple, and admirably adapted to mark out a safe and long course of life. and education only assists her in illustrating her sanatory rules, of which we regret to say the wisest are often the most ignorant. How strange the school should be only designed to enlarge the mind without strengthening the shell —mind often being cultivated on the ruin of the physical powers,—the diamond of intelligence often sparkling only amidst the wreck of a shattered constitution. A strict observance of nature's laws, will, however, enable us all to perform our duties to ourselves and to society, and compel us to make the study of health the chief lesson of youth,—the first duty of man.

The engraving is designed to shew the relative position of heart, lungs, liver, stomach, and intestines. The letters will indicate each; as for-instance, h, heart—st, stomach. The readers attention is for the present directed to the course of the intestines, from the lower extremity of the stomach. When the reader has understood the general anatomical conformation, he will be able to form a pretty correct idea of the process of digestion, which we intend to discribe fully and minuetly. The intestine winds and turns upon itself, or is coiled up and deposited within the abdomen. The intestine is continuous throughout, although anatomists divide it into six portions,—a circumstance which is apt to confuse the general reader if we had adopted these terms in our present essay. The simplest division is into small and great intestines—the first proceeding from the stomach, the last terminating at the seat. The small intestine constitute the greater portion, and differ from the larger in size and functions. The structure of the intestine is very much the same as that of the stomach. There are three membranes: the outer is the smooth, white, shining coat, which any one may notice in butcher's slaughter-houses. It is always moist, and, being folded over and over the intestines, it binds them in their places, at the same time that it allowes free motion, such as that in breathing, exercise, &c.

The muscular coat consists of fibres, running both lengthways and circularly, the alternate contractions of which force the contents of the intestines onwards, giving rise to the motion represented by a crawl ing worm. Some neauseous matters, as tartar emetic, reverse the action of the muscular coat, and produce vomiting; whilst others, as colocynth, aloes, &c., increase its natural action and produce purging. The internal coat is much the same as that of the stomach, full of wrinkles and folds. This lining is the most important, as far as nourishment goes. As we shall show, it is in direct contact with the products of digestion in the stomach; and from this origin spring many eruptive diseases. But as space is limited, we had better refer the whole subject of digestion to No. 3.

GOBBLE AND GABBLE.

"Well, my dear," said Gobble, addressing his better half in a very grumphy humour, "so you made a night of it with your tea drinking, Whenever did you come home? I never heard you."

"No, I don't suppose you could, Gobble. I suppose you were at the Three Tuns, instead of enjoying a rational evening with us."

"You know better than that; you tooke care not to send your sister, and left a precious charge on my hands. I never had such a night of it, with those squalling brats. Just catch me again at that job!"

"And what is it to me, Gobble, that has it every day, and every night too? I am glad you have found it out."

"I found out more than I want to find out again, my dear. There was Tom first, and then his sister:—but it's no use talking,—I won't do it. I would rather drag a truck, with a gas pipe on it. I had no sooner brought one down and got it quiet, than t'other opened its pipe. Andwhat do I know about children?"

"You ought to have more thought, Gobble for those who do, then. How many nights have I to wait up, when you are sotting over the way? You need not turn up your nose, Gobble; some one had to wait on you, Gobble; and I daresay you gave them trouble enough, —the kitten's the making of the cat.

"Folks can spend as much time over tea as ale, my dear, and be just as useless next morning."

"It's a great story, Gobble,—one of you men's stories, Gobble. Spend, indeed!"

"How many cups of tea did you drink, my dear?"

"How many cups?—what's that to you?—just as many as I liked."

"So *I* say, my dear, of my ale; and now it seems, as *you* often say, you have drank more than did you good."

"I didn't make a beast of myself, Gobble. We haden't above—"

"-Six rounds my dear."

"I didn't count them Gobble."

"That's just my fault; I lose count of the pints. I am sure you look ill, my dear; you're heavy-looking and bad tempered, You must have had something in the tea to temper it, and you too——"

"Find it out, Gobble."

"I *can* find it out, my dear. You are slovenly; and didn't I catch you with your head on your hands and your elbows on your knees? and weren't you cross with little Tom? and didn't you tell him to go play, and that on a Sunday morning?"

"You'r a fool, Gobble, with your suspicions and your jealousy. I wish I was only as sharp with you. I tell you we had nothing; only Mrs. Jones did once—only once—press us to mix——"

"Ha, ha, ha! I was sure of it. If they didn't press me to mix, and if I wasn't soft enough to do it, I should be all right. But come, my dear, tell us all about it. How many cups had you?"

"Suppose we had a dozen, Gobble; What harm is there in drinking tea?—although, I will say, it was rather strong, and,—I don't know how I feelt it too."

'I thought tea cured the nerves, my dear."

"So it does Gobble; but the butter-toast, you see does not agree with me."

"No more does the welsh-rabbit with me, my dear. I daresay, the truth was known, a friendly chat over tea is as likely to make folks intemperate as a friendly chat over ale; and a pipe is as bad as butter-toast. Tea, my dear, when drank hot, is very bad; so I have heard my mother say; and it never does for folks with a rather quick temper."

"Who has a quick temper, Gobble? Tell me that. Talk of a quick temper:—there was Mrs. Flannaghan, who is such a scold, she drank fourteen cups of tea, as I'm a christian."

"More power to her elbow next time, as her husband says. How did she manage to conceal such a tubful?"

'How do you, Gobble, manage your four or five pints of dark, dirty, treacly stuff, only fit for pig's-wash? I am sure that pot you have got last-night has all the flies in the house round its brim."

"They know what's good for them, my dear. It's a lesson of nature, my dear. You see no flies on your tea cups."

"The more shame to them, Gobble. It shows their want of taste. Tea does not make us unfit for anything."

"How is it my shirt is damp, my dear, and the breast all starchy and iron marked? You must have had some strong excitement to hurry over the ironing in that way. Besides there is a mark of a redhot iron on the back."

"That was Mrs. Wilson, Gobble, who called to take me with her."

"When was that, my dear?"

"Why, about four o'clock."

"Sooner;—for I was here at four. Well, you came back at twelve. There are eight hours spent over a tea-pot, scandal, and hawthorn leaves."

"No wonder, then, I was ill, Gobble. You are right; I am sure they put something in the tea."

"And I am sure they put something in the ale. The fact is, my dear, there is a want of rule on both sides. *Temperance in all things* is the rule. It is not merely in drink; there is tea and eating. Yes, that is a point worth noticing, my dear. Temperance in ale and spirits is very good in its way."

"Bless me, Gobble, where did you find your preaching cap? You talk like a lawyer; and how long will it last? You think a vast deal of yourself, Gobble, for your week's temperence."

"My dear, I find it answer; and I see with a different eye, the laws of nature that regulate tea drinking."

"Tut, Gobble, say no more. You will treat resolution before the week's out; and, as for tea, we haven't such a party every day; I—wish we had."

"Heaven forbid it:—my linen and my children would suffer. As for the house, if you had tied the mop to the cat's tail and let it run over the place, it could not have been scrubed down on a Satur-

day night worse than you have done it. Ah! my dear, you should guard against tea and tattle."

"Guard against your grandmother! The Lord preserve us! Have you found some parson's sermon? or what's come over the man? I say, Gobble, were you over the way this morning? You never talk except when you are touched, or getting over a drunken fit."

"My dear, I see the error of over indulgence, and must mend my ways."

"That will be, Gobble, when you wear less of the road between this and the Three Tuns,."

"And you to tea parties, my dear. There are the children unwashed; every thing out of order; you out of temper; the breakfast cold; my linen damp; myself at this hour unwashed; the clock not wound up; the press door left open; and the leg of mutton half eaten by the cat; all through drink, my dear,—all through tea-drinking to the extent of at least two gallons per head."

"Have you done, Gabble?"

"Not yet, my dear. There are other items,—such as one or two of our cups broken, that you lent; your new gown all over stains; and—and—a game at cards, I daresay, with the tattling club, would cost you something, my dear; and as you forgot your pocket on the foot of the bed, it seemed to me rather light; and——"

"I tell you what, Gabble' you are a provoking fellow, and no man, to talk to me in that way. My tea did not make two policemen bring me home speechless."

"It would be a mercy if tea would have the same effect."

"You're a brute,—that you are."

[*Exit* Gable.

SIR JAMES GRAHAM'S MEDICAL REFORM BILL.

Did the colleges ever rescue the profession from barber-craft? Do the endowed and lazy teachers protect it from the competition of quackery and the infliction of learned humbug? No; but the free teachers did. Those patient, talented pioneers, the private lecturers did. They conferred upon medicine the stamp of utility. They raised it to the dignity of a science. These men want no protection; they want liberty of action,—a free scope for the exercise of their splendid acquirements; and the public, who have no fellow-feeling for the monopolists, will sympathise with them and support them. The public safety requires the abolition of charactered monopolies. The public mind needs an expansive and generous infusion of medical knowledge. And what does the man who has acquired anatomical and surgical knowledge, who has mastered chemical science, and who has attained a thorough knowledge of the properties, qualities and doses of medical remedies, as well as an hospital and dispensary experience, what does he ask? a fair field and no favour. Let medical practitioners be armed with that. Let the public comprehend the mystery, the difficulty, the elevated and complicated nature of medical science, embracing, as it does, every branch of human knowledge; and then, when they un-

derstand the language themselves, they will soon detect the impostor and employ the true linguist. The profession, at least the enlightened portion of it, are now like the astronomer and the shepherd: the former preached to the peasants about the course of the planets and the stellar phenomena: the latter predicted from meeting signs the changes in the atmosphere without knowing or caring whether the earth was round, square, or cocked, or whether the sun went round the earth, or the moon round the sun. Which acquired most credit, it is easy to devine. So, now, there are men who have been shrewd observers of animals and of the properties of plants, who conveying to and applying upon "*humans*," as they call them, their practical experience, succeed in routing out all faith in medical men from the public mind.—So the law is to put down this state of things? no—but knowledge must and will; and the pride of the profession must bend to examine the philosophy of the meanest remedy which is used as a specific by confiding thousands, or learn to apply a better. Have we not enrolled already remedies in the pharmacopœia, which were formerly scouted as quack prescriptions; and can we boast of more than one or two specifics within the whole range of the Materia Medica?

All these matters require careful consideration; and before we go any farther into the merits of Sir James Graham's Bill, let us not forget that: Firstly, there are numerous, nay, disgraceful evils to be remedied in the colleges, as well as the profession at large: Secondly, that monopoly has hitherto only propagated indolence, avarice, and incapacity, whilst it has perpetuated ignorance and encouraged quackery: Lastly, that protection is not needed for the learned doctors, but for the unlearned public, and that a liberal and enlightened profession ought to prefer standing on its own merits to that of the pains and penalties of an act of parliament.

With these general remarks, we shall criticise the bill, the whole bill, and everything in the bill, good, bad, or beneficial to the public; after which, we shall pursue the course we have indicted in the prospectus, taking public health for our text.

THE PEERS OF WESTMINSTER.—We are glad to observe that the last of the noble line of Westminster piers is having the splints removed from its legs, the fracture having been happily reduced, and the limb made as straight and sound as before. How long the cure may last, we do not know, as there is a hereditary tendency to rickets in the whole family. The rheumatic attack in the *jaw*, caused by the vicinity of the Houses of Parliament, we regret to say is not relieved, as the whole side of the face is carefully and constantly mantled. The constitution, we fear, is undermined, and the noble family will soon become extinct, unless a new peerage be created.

INVALIDS' CORNER.

"Amusement is conducive to the restoration of health."

THE POISONER.

(Continued from p. 16.)

"One evening (it was on the 16th of July, I left Penantier's house, the receiver-general of the clergy, who lived then near La Tour de Nesle, and I proceeded toward Picpus. Passing by the new bridge, opposite the gate Dauphine. my coachman was assailed by a shower of stones from the lacqueys, and the pickpockets sought to enter my coach. It would certainly have been broken in pieces, had not a young officer, whom I had encountered already on my journey, made his appearance, accompanied by his soldiers. He rode close to me sword in hand, assailed the most riotous, wounded or killed those who resisted, and put the rest horde of valets to flight. I descended from my carriage to thank the brave officer who had saved my life—he had disappeared.

"And without doubt you never saw him again?

"I picked up a portfolio, in which (strange event!) I discovered my portrait drawn from memory. I was about to order my servant to seek for the owner, when the same young man, his left arm in a sling, his countenance pale, and his head bloody, presented himself again. He was about to speak; but his eyes closed, and he fell senseless on the steps of my coach. An hour later, he recovered his senses in my house at Picpus."

The astonishment of Sister Marie was at its height, and rendered her incapable of addressing a single word to the Marchioness.

"Eight days after this adventure," continued she with a profound sigh, "a new feeling was aroused within me. I was beloved; and I loved, in return, the young officer of the regiment of Tracy who had saved my life."

"You, Marguerite!" cried her sister.

"Do not blame me;—for you do not know what it is to marry a man without love, or to pass your days and nights with a being whom you detest and despise. You would have loved him, Marie, if you had encountered him in life, and heard him lament his want of family and fortune, his want of those proofs of nobility which would have secured him honour and renown after many a brave action, and his relation of his secret and consuming love for me."

"But," asked Sister Marie, with curiousity mingled with interest, "what became of him?"

"Fifteen days afterwards his regiment left Paris and mached to Valenciennes, where my husband then was. He left me, promising to let me hear from him."

"You did not declare who you were, then?"

"No: his letters were to be addressed to my country house, under the name of Marguerite. I waited anxiously, and I waited vainly. Three months since my husband wrote to me, that the seige of Montmedy was most disasterous to the regiment of Tracy, and that many officers had perished. Without doubt, Saint Croix was one of the number."

"Courage, sister!" said Marie, taking her hands,—"courage! and forget this sinful love. Think no longer but as to the means of making reparation for the fault."

"Fault! You do not know all, Marie. There is :—no, I dare not reveal the horrible secret."

"You frighten me," exclaimed the sister of mercy, withdrawing herself.

"I am indeed culpable; and it is to receive consolation that I spoke any to you; for I never could have strength to make the revelation to any confessor of my crime."

"Crime!—unfortunate!—I begin to comprehend. That journey, which you announced to us last year——"

"Was to conceal my condition from the observation of my father and my family; and to protect my honour and that of my husband, I committed a crime."

"What?"

"I killed my child!"

At these words, Sister Marie uttered a loud cry; and, rising up, she tremblingly made the sign of the cross. The Marchioness, her cheeks covered with tears, threw a supplicating look at her sister, and in a feeble voice, broken with sobs, said:—

"Is it not frightful to take the life of a tender creature that holds out its arms towards you? It is a crime unknown to the most barbarous race; but which we commit with impunity, to repurchase the honour of a daughter and the reputation of a wife."

"You might have reared it far from you," said Marie, moved by a religious indignation.

"Could I confide it to strange hands, and be forced, one day, to give it the secret of its birth, and leave it like Saint Croix to curse the world and its mother?"

She had hardly uttered these words, when the sound of horses' feet was heard in the court. A servant announced the Marquis de Brinvillers. The news came like a thunderboult. No accounts had been received of him during three months.

The Marchioness, accustomed to dissemble her chagrin, composed her countenance, arranged her dress, wiped her eyes, and appeared calm, in spite of her grief.

The Marquis soon entered, accompanied by M. d'Aubray and a young man.

"Good day, madame," said he to his wife, kissing her forehead.

Without noticing her uneasiness, he added,—

"I present to you one of my new friends,—a prisoner whom we all believed dead, and who has rendered me incalculable services. My dear friend," said he, taking the hand of the young man and leading him forward, "I present to you the Chevalier Saint Croix, captain in the regiment of Tracy."

The Marchioness uttered a scream and fainted in her sister's arms. The civil lieutenant ran to his daughter, looked at her with a dry eye,—and, as he retired, observed,—

"Tis very strange."

(To be continued.)

A PLEASANT PLACE.

A Long line of buildings, bearing the above enticing name, extends from the end of Brook Street, Lambeth, to the back of the alms houses, Elephant and Castle. The windows look into Chester Gardens; but whilst the eyes enjoys the green and pleasing prospect, the nose pays tribute for the pleasure, on account of a most picturesque ditch which intervenes. In a cesspool, green, bubbling, and nauseous,—the richest of all corrupted pools of the species,—may be seen dead cats, dogs, vegetable deposits, and animal refuse, mixed with mud, cabbage stalks, mussel-shells, egg-shells, broken pots, old cans, and decayed rats. The miasma, or vapour, arising from the fermentation of vegetable and animal matters, would knock down twenty hives of bees, or floor a score of Barclay's porters, horses, drays, and all. The children, who seem in that district to be in considerable force, resort to the gentle-flowing stream, where weeping willows hang o'er putrid carcases and vile abominations. The fever trap is a good one, well contrived, and just at the door-step

---

ANSWERS TO CORRESPONDENTS.

L. L, Nottingham.—With the exception of the last-mentioned complaint (for which we shall prescribe at a future period), the whole of the disturbance is caused by costiveness. She must attend strictly to diet, and let her food be light and easy of digestion, and the meals regular. She must accustom herself to go to stool, whether nature requires it or not, every day after breakfast. This custom we have seen set all to rights when every thing else failed. Let her, however, procure a dozen of the following pills, and take one night and morning, assisting their operation with a wine-glassful of salts and water, the salts being dissolved in water in the proportion of two ounces to a quart, to be taken two or three times during the day. Pills—Take extr. colocynth, iii. gr.; pulv. gambogiæ i. gr.; mix and make into one pill. Write in a week. A clyster of gruel, salt, and senna, will relieve her at once; and it should be used without delay, if obstinate costiveness continues for the length of time stated.

J S., Kingsland.—The habit must be instantly laid aside, and, from his statement, we promise him a cure. Begin with the general habit of taking a shower-bath every morning, or, in the absence of that, dash a jug of cold water over the head, shoulders, and spine. Dash water over the part complained of. Bathe frequently, plunging in and out of the water. Sponge the whole body at times with water in which about a tea-spoonful of muriatic acid has been mixed. Eat generous food, drink port wine, but no spirits, nor ale, unless home-brewed. Take moderate exercise, keep your mind at ease, and write again in a week or two, when we shall advise with you as to future application.

Madsley.—Apply Gowland's Lotion to the nose two or three times-a-day with a piece of soft linen. Attend to the bowels, and avoid snuff.

Amor.—Rub the back night and morning with soap liniment and hartshorn, equal parts; wear flannel, and take ten drops of sweet spirit of nitre in a little sugar, night and morning. *Gin*, if *unadulterated*, will do good rather than injury, in small quantities, *well diluted*

M. B—Extr. colocynth, xx. gr. Make into four pills, and take one every second night. A gentle stimulus is all that is needed to set nature right.

C. O.—We have already given a simple and effectual prescription for a troublesome cough, arising from the late changeable temperature. Try it.

N.B.—Advice will always be given to J. T., or any other person, *gratuitously*, through the pages of the Doctor; but it is necessary to give *age, sex, employment, symptoms of disease, length of its duration, together with the most probable cause, or, at least, to describe the commencement of the attack. If private advice*, by letter or otherwise, is solicited, it will be attended to; but any one may have advice through the above medium—viz., *answers to correspondents*,—without the necessity of giving their names, or the possibility of their being made known; only their may be questions which we shall decline answering in our pages.

THE
FAMILY DOCTOR.
ILLUSTRATED.

No. III.] JUNE 21, 1845. [PRICE 2*d.*

ABERNETHY.

The place of his birth is uncertain. He was born in 1763 or 4, in the town of Abernethy, Scotland, or Derry, Ireland. He died in Enfield on the 18th of April, 1831, aged 67. He was apprenticed to Sir Charles Blick, surgeon to Bartholomew's Hospital, under whom he acquired a thorough knowledge of his profession. In 1786 he was appointed assistant-surgeon to the hospital, and then lecturer on anatomy and surgery. He, on the death of Sir Charles Blick, became surgeon. Abernethy was a pupil of John Hunter, and from him he derived a profound taste for physiology. His grand system was based on the principle, that local diseases are symptoms of a disorded constitution, and are to be cured by remedies calculated to produce a salutary impression on the human frame. His second principle was, that the disordered state of the constitution originated from, and was allied with, derangements of the stomach and bowels, and could only be cured by remedies

exerting a curative influence over these organs. Great as the reputation of Abernethy was as a physioligist, anatomist, and surgeon, he owed his chief success to his celebrated lectures. He was gifted with the faculty of conveying to others the knowledge he possessed, in a clear, succinct, impressive, and at the same time fascinating manner. He was easy, fluent, logical, and witty, at times humourous almost coarseness, and abounding with anecdote and illustration, as the subjoined specimen will prove.

"Mr. Abernethy, in one of his lectures at Bartholomew's Hospital, related the following of a case of fracture, the authenticity of which he could answer for :—"A lunatic, in attempting to get over a wall, fell, and produced a complete fracture of his right leg ; the bone projected a little through the skin ; the opening was enlarged, and the bone reduced. The fracture was secured—first by a many-tailed bandage, then by splints, the wound carefully closed by plaisters, and the surgeons who had the management of the case, went away consoling themselves on the nice opposition of the bones. The man paid particular attention to the manner in which they had applied the apparatus, and as soon as they were gone, he took it into his head to remove the bandage and splints from the injured leg, and set them on the other.

"He discovered a hole in the feather-bed on which he was lying, and he thrust his fractured leg into the middle of it. When the surgeons arrived on the following day, they were much pleased with the look of the limb: then said, 'How straight it lies ; it appears not to have shifted in the least from the position in which we placed it. How little swelling there is ; indeed, there is scarcely any!' and so on. They thought it would turn out a very excellent case. They came from time to time to see the patient, and finding everything going on well, they did not disturb the limb. After the usual period had elapsed in which such a fracture is supposed to heal, they took off the splints to examine it. They were quite surprised to see how straight the leg was ; and as for the wound in the integument, it had closed so nicely, that they could not perceive the scar.

"'Well this is very extraordinary!' 'But,' said a person present, 'is this the leg which was broken?' 'Broken ! yes, certainly : could it be supposed the splints were put on the wrong leg?' However, it was thought they might as well look at the other ; but it was not to be found! After some search, it was discovered buried in the feathers ; and, when they pulled it out egad! it was crooked enough, yet the wound had healed, and the bone united!"

A Lady who wished to be considered a fine talker, remarked that her doctor considered that her disease was a cataplasm (spasm), and had ordered her into a regiment (regimen), which some one remarked was *not* the *cotdstream*.

FAMILY COMPLAINTS.

Influenza.—This disease has been very common of late, in consequence, as we believe, of the variable state of our atmosphere. It is an epidemic; or, in plain language, has *come upon us* through an atmospherical agency, without being transmitted by contact between person and person. Its agency is general. For instance: it is authenticated that the Atlas ship, an East Indiaman, had the whole of the crew attacked with this complaint while sailing from Malacca to Canton, and that on reaching the latter place, the population was found to have been generally attacked about the same time as the sailors. The infectious, or atmospherical agency, that gives rise to the influenza, seems to travel westward, the disease having appeared, for instance, in the East Indies and China in 1780, and having reached England in 1782. The influenza attacks people of all ages,—children as well as grown up people,—also horses, dogs, and cats.

Symptoms.—Are similar to, but more severe than those of a common cold. There is a severe cough, loss of appetite, and great debility. The attack begins with flushes of heat and then cold: there is a heaviness or drowsy feeling in the head; then sneezing; wateriness of the eyes; and, finally, cough and sore throat. All the symptoms increase in violence until there is head-ache, fever, pain in the back, and sense of weariness in the limbs; stiches in the chest; sometimes sickness and vomiting; and profuse perspiration. These symptoms may increase or diminish in intensity, and continue from two days or two or three weeks. The languor or dejection of spirits is the worst feeling, which extends so far that a person so afflicted cares neither for eating, talking, reading, walking or anything that requires mental or physical exertion. There is a prostration of the whole powers of the body: one day it is much easier—another much worse.

Remedy.—The disease being a fever, must be treated as such, and more particularly so with people who have any chronic or old standing complaints on the lungs or chest. If the bowels are kept sufficiently open, great relief is experienced, and, as far as we have observed, by salts and cream of tartar—a wine glassful every three hours—as well as small doses of calomel and antimonial powder, two or three grains of each at night. The cough may be relieved by a mixture of gum acacia and water, six ounces; syrup of squills, two drachms; sweet spirits of nitre, two drachms; the juice of a lemon; and liquorice juice to sweeten the whole. One teaspoonful to be taken frequently. Paregoric elixir has been recommended; but we do not like any opiate (and paregoric contains one) unless the bowels are freely opened The patient should move about, if possible, and avoid the sweating process as much as possible, by getting out of bed, or having a light covering. A little port wine will do no harm, when there is a feeling of sinking; and its acidity even checks perspiration, whilst it braces the stomach. We have ourselves tried good table beer, and found it to purge very well; but that will not suit all

constitutions. During recovery, an infusion of bark or gentian, with an occasional glass of port wine, or good porter, will be found safe and beneficial. Solid food should be used in preference to broth. Exposure to the breeze will produce no danger during convalescence. There are cases, but very extreme ones, where a far more active treatment is necessary. We have described the general symptoms and remedy, and with that we wish every one to escape this annoying and debilitating complaint, under which we ourselves are now labouring,—perspiring like a racer, sneezing with an energy that would arouse the dead, croaking like a grey-headed raven, and our eyes full of tears, like a mincing boarding-school miss. It is really enough to make Job curse all the days in the calendar.

Apoplexy.—Those who are subject to attacks of apoplexy are generally people of a full, gross habit of body—men of the bottle and platter, excellent drill-sergeants at the knife-and-fork manœuvres, fat landlords, comfortable annuitants, and high-living bishops, aldermen, and aristocrats. The premonitory symptoms are, fullness; a feeling like that of a band round the head; giddiness; dimness of vision; ringing in the ears; coldness of the extremities, &c. The remedy is abstinence, low diet, and hard work. Let a bishop exchange with a field-labourer, and he will never have either gout or apoplexy. But, as people who have plenty, will enjoy all they can get, the next best thing is to point out a preventive. A smart purgative, say of calomel and colocynth, four grains of the former and six grains of the latter, should be taken, and followed up every three hours by a wine-glassful of salts and senna, or black draught. Afterwards, animal food should be avoided, as tending to produce too much blood, when the system has already as much as it can stagger under. When the attack does come on, the minute vessels on the surface of the brain are ruptured, and the blood escaping, presses on that important organ, causing loss of sensation and death. Intemperance often produces apoplexy in persons by no means what is termed stout. Excessive eating, or indulgence in the passions, also brings it on: so will a high temperature, tight neckcloth, tight lacing, or sudden emotions of rage or joy. The meaning of the effusion of blood on the brain is simply that of nature struggling to get an outlet somewhere; and if she cannot effect it by the bowels, it must be done for her by blood-letting, cupping, or leeching. The only remedies are—strict abstinence; great attention to the bowels; plenty of exercis, and sparing diet, chiefly vegetable. Nightcaps are bad, and so are morning naps after nature has announced that one has had enough of sleep. I knew a tailor who had gout, and was subject to rheumatism, of course he was a master; but, after he had one stroke of apoplexy, and found a stitch loose in the constitution, he left his counter, betook himself to digging, hoeing, and raking a piece of ground which he rented. He was a very large specimen of a tailor before he exchanged the needle for the spade; but in the space of six months, what with early rising and hard work, he left his paunch behind him, and came into town as slim and ender

as a greyhound. He showed me a double in his waistband that would have encircled any ordinary individual, and declared that he slept better, ate and drank better, enjoyed life better, and wore less cloth, than he had done since he was twenty. I would strongly recommend the tailor's remedy to all who are in the least degree affected with a tendency to gout or apoplexy, as the very best I know of. It is worth all the rules of diet and all the physic in the universe; it will cure every one, and physic does not do one hundredth part as much.

Scurvy is often hereditary, and may arise from peculiar climate or locality, from the use of salted provisions for a great length of time, from improper diet, unwholesome food, or anything which has a tendency to vitiate the blood or disturb the action of the bodily organs. Symptoms—The bleeding of the gums, the fetid breath, the bleeding of the nose, the crackling of the joints, the blotches on the skin, the general debility, and the pale, anxious countenance As it proceeds, there are discharges of blood from various parts of the body, obstinate ulcers and scaly eruptions all over the body. Lastly, a wasting hectic fever comes on, and dysentery or mortification destroys the party afflicted. Remedy, The cause once known, the cure may be speedily effected in the generality of cases. If brought on by salted food, vegetables will remove the complaint, or lemon juice, tartaric acid, cider, vinegar, or cream of tartar, as drinks. Milk produces sometimes great benefit, and buttermilk is excellent as a beverage. All kinds of salads are good. I knew a young man who had scurvy: he was a weaver, and was much afflicted with blotches and the scaly eruption. I advised him to eat vegetables, open his bowels with cream of tartar, apply the golden ointment, of the size of a pea, to each of the sores when the bowels had been sufficiently opened, and to take tartaric acid in water as often as he could. He told me that when trade was bad the previous year, they were all starving, and that his principal food was turnips, which he said removed the scaly sores altogether; but he did not know the reason until I told him. The diet must be regulated properly vegetables eaten freely, plenty of acids used, and, with a general attention to the bowels, all ordinary cases, with a little medical superintendance, may be overcome. In severe cases, medical aid must be had; and in obstinate ones, we advise change of air. Harrowgate water is considered a most excellent remedy for scorbutic patients. I take care of my children by giving them acids to their food, and proper diet, clothing, and an airy bed-room, under which circumstances no fear of scurvy need alarm anyone, unless it be hereditary. To prevent it in children is certainly the best way; and nature seems to make them fond of both sour and sweet things an admirable arrangement of her own.

Erasmus, writing to the Pope, by whom he was reproached for his not having abstained during Lent from animal food, remarked "I have a most Catholic soul, but my stomach is entirely Lutheran."

GOLDEN RULES FOR HEALTH.

1. The air being the first element necessary to our existence, it ought to be breathed pure; and for that end a perfectly free ventilation should be preserved in all dwellings.

2. No one should sleep in a close confined room, nor where there are musk plants, or other flowers, nor where fermenting liquors are kept, nor over stables or cow houses. Above all, in hot weather, no one should sleep next to the roof—many persons being destroyed by the emanations of heat, as well as by those of charcoal.

3. Sleeping on grass, washing or bathing in cold water when hot, or drinking cold water when sweating, are equally fatal.

4. The temperature of the house or workshop should be equally maintained,—too much heat predisposing to inflammatory diseases, as too much cold or damp produces rheumatism, affections of the lungs, and enfeebles the digestive powers. Clothing should be used according to season, age, climate, and employment, care being taken to cover the body, after running, playing at cricket, &c.

5. During the dog-days, bilious and typhoid fevers being common, new fruits must be carefully avoided. Bathing should be resorted to at proper times, and acid drinks used.

6. Passing from great heat to cold exposes persons to apoplectic attacks and congestion in the brain.

7. To remain exposed, uncovered to the sun's rays, is to invite a brain fever, insanity, or madness.

8. It is a most pernicious custom to be bled or purged at stated times; because a necessity is thereby created for the continuance of such evacuation, which acts like a second nature: keeping the bowels open by cream of tartar or Epsom salts, and the system down by very low diet, principally vegetable, and abundant exercise, so as to cause free perspiration, are far superior.

9. Never close an ulcer, running, or sore, particularly eruptions on children, without great care and medical advice. Convulsions and death ensue from too rapidly closing an old standing sore.

10. Strong mental excitement, sudden surprises, and fear, often create immense mischief, especially with women and children, causing fever, convulsion, epilepsy, idiotism, madness, and death.

11. Every person engaged in violent physical exercise requires nourishment every four hours, or four meals a-day,—such is the waste produced in the system, which nature requires to be provided for, or the health sinks.

12. Drink should be taken according to the wants of nature, and in proportion to the food. Taken in excess it becomes a poison: above all, the spirits and ales adulterated, and of which government takes no notice, are productive of awful afflictions amongst workmen. The sunday and monday excesses are often felt on Thursday; and during the whole week, thousands are *thirsty because they are hungry.* They drink, because ale and porter are cheap; the appetite is destroyed; and the reason

clouded to the contemplation of future misery. In mercy to those who suffer from the effects of trash and poison, we subjoin a receipt for the morning draught, with an advice for temperance during the day :---

Take Liq. Ammon. Acet., half an ounce; Tinct. Rhœi., two drachms; mix ginger beer, or pop, one bottle. Drink the mixture before breakfast, and be temperate afterwards.

TO THE LADIES.

When a lady is in an interesting way, from the earliest possible period she should avoid all chances of accident. She should never lace tight, but rather leave all her garments as loose as possible. She should take moderate exercise, and occupy her mind in an agreeable or amusing manner as often as possible. The attention to family affairs is enough of distraction for most folks, they may think; but still, rational enjoyment should be particularly encouraged, where there is no pressing or crushing, as in public meetings or theatres. The bowels should be attended to strictly; but no strong medicines should be taken. The diet should be wholesome and nutritious, avoiding everything which is known to disagree with the stomach--that is the best test; it is nature's own; and without alluding to the absurd ideas entertained, I would content myself with making the stomach the barometer that was to regulate food and drink. When near confinement, all those remarks require stricter attention, more especially in reference to the bowels. The body should be prepared for a violent effort, and every chance afforded the system of getting all over speedily and easily. After confinement, a fortnight is little enough to be in the bed-room. Then the diet must be strictly watched.

And now the infant must be noticed. If it does not digest its food, and seem lively and active, it is caused by the milk; that is altered in quality of the mother's diet, which must be regulated and changed, and physic given to the mother instead of the child. It will reach the latter through the improved quality of the milk. A child often throws up the milk curdled. If it was in the most perfect state of health, the milk curdles the moment it touches the stomach. When curdled, and about to be digested, its quality may be bad. Then look to the mother. A calf's stomach is used in making cheese, by curdling milk; and the human stomach has the same power. All spirits should be avoided as poison by the mother. When accustomed to good beer, it is not so objectionable, but still, even it must not be indulged in. The mother should be kept free from all annoyance, and treated as every man would like his mother to have been treated when he was an infant.

A Medical Man, who was unfortunate, took an inn; when some of his friends remarked, that he ought to put up the sign of the "broken lancet." "No such thing: formerly I could not 'get' patients, now I 'make' them."

THE NEEDLEWOMEN.

A pale, emaciated-looking creature entered my consulting room one morning, when I gave advice gratuitously to the poor, and sat down with a sigh on the chair I pointed out to her. I saw, from the studied neatness of her threadbare dress, and the stamp of suffering on her countenance, that she belonged to that most neglected and cruelly used class of females known as the London Needlewomen.

"Well, my girl," said I, in a kind, sympathizing tone, which I really felt, and which, when felt, is so easily and naturally understood, "What may be the matter with you?"

Encouraged by the interest she saw I took in her, she answered frankly, but in a feeble tone of voice:—

"Indeed, doctor, I do not know what is the matter with me, but I will tell you exactly how I feel."

"Quite right—proceed."

"I always feel as if life was slowly ebbing away. All night long I have frightful, disturbed dreams, when I do sleep; but I toss and tumble, sometimes only dozing, until daylight. Then I have violent perspirations, and no appetite. I am never refreshed as I used to be at home in my father's cottage, when the goldfinch awoke me at sunrise, and I felt as if I should like to scamper over the meadows, so light and strong was I then———"

A tear sparkled in her eye, and she paused.

"I can hardly find strength to light my fire, and for hours I seem as if arousing myself from a sleep produced by opium. I am more wearied when I rise than when I go to bed. I take a cup of weak tea, and that revives me; but I don't eat anything as I used to do, nor does milk agree with me, which is strange, when I think of the time when we had it warm from the cow in the meadow. I want tea, or something to cause an appetite. Then I must take my cup of tea whilst I am sewing the shirts I get-——"

"From the Jew's warehouse?"

"No, indeed, sir, Mr. Skinflint is a christian, and goes regularly to church, and only wants religious girls in his service. Well, sir, I sew from six o'clock until ten at night."

"And how much do you earn?"

"Why, sir, my being here proves that I don't earn much, not more than a shilling a day, and often not that, generally tenpence, and I am a good hand and a quick needlewoman. Besides, I get some of the better kind of shirts to make up."

"Good God, is it possible that the shirts we see sold for three and four shillings each, are made for that money!"

"It is true, sir, and for some we only get three-halfpence a piece, and it takes a quick hand to make two in the day."

"Poor girl! you cannot live on that; you must have some other resource."

"Why, sir, I have a very poor appetite, and unless I took a little gin I could not sit to my work so long; besides——" Here she blushed and held down her head.

"Don't be ashamed, my girl, at any misfortune in your case, which is the fault of necessity, not the result of vice."

"Indeed, sir, it is true as the gospel; but there are wretches who are employed by the rich, even by noble senators, who take advantage of our condition; and how can a poor country girl defend herself against the devilish plans by which our ruin is too often effected? But I would rather work myself into the grave (and a blessed friend it would be), than follow the life some of our poor girls are compelled to do, God knows, against their wills generally, but there are exceptions."

"No doubt—no doubt. But we are wandering from the immediate subject."

"True, sir. Well, doctor, as I said before, I get faint and sick, and a little gin revives me; but it begets a craving for it in spite

of one's self. It relieves the pain in my breast for the time, but only for the time, doctor, for I think it gets worse, and has settled on my lungs. I am often sick, too, and feel a bad taste in my mouth, and the perspiration is cold. My legs too have swelled of late, and my teeth have decayed very much, which I think very strange. My eye-sight is very weak, and I have often to stop and bathe them, and look on the green trees when I can. That does them most good; and if I was in the green fields, and on the knolls where the furze blossoms and the cowslips grows, and the lark rises to the sky, I might——"

The poor creature burst into tears, and wept bitterly over the recollections of youth, when nature stamped on her memory in enduring characters the simple beauty of her works. For the life of me I could not help shedding a tear with her, and my heart was full of indignation at the system of usury, whose food is the lingering tortures of the poor. She trembled violently, and on feeling her feeble thready pulse, I felt the cold, clammy indication of fast approaching consumption. A little wine revived her, and she continued,—

"My parents are both dead, doctor. There is an end of the country and the fields, the meadows and the green glade, for me. Can you do anything for me, doctor?"

"Poor girl, I pity you; the whole of your affliction may be traced to your employment. Your appetite is destroyed by confinement in a close room; your disturbed rest arises from the impaired digestion which want of exercise gives rise to; the decayed teeth from the like origin; the swelling in your legs proceeds from sitting constantly, and thereby preventing the proper action of the muscles; the pain in your breast is produced by leaning over your work; and the weakness of sight by having the eye constantly bent, without relaxation, on white or blue stuffs, sewing by candle-light, and plodding over the midnight lamp. The gin, no doubt, will give a temporary relief, but that is deceptive. Your rest is physical exhaustion---nature struggles against the nervous irritability and strives to soothe it, but a constant repetition of the cause counteracts her benevolent intentions. Brain, stomach, and lungs, are all affected by turns, and the whole physical powers prostrated, giving rise to the feeling of sinking you complain of. Medicine can do you no good; or, if it does, it will act like the gin, for a moment relieve, and then cease to support."

"And is there no hope, doctor?"

"Hope, yes, provided you could get other employment, where less application, more exercise, and better food, would rally the sinking powers of nature. Even the place of a kitchen drudge would be preferable."

"My father never liked me to be a servant. What am I to do? They say some of the aristocracy has taken up our case; but I know, when I was in the dress-making line, that the sudden demands of fashion were owing to the imperious orders, and most of the girls died from consumption, or suddenly in consequence of over work. They will have their orders done in a moment. All orders

come in together, and the work must be done, if we never sleep. I have little hope from them."

"True—there are, however, good people, thoughtless, and bad ones, in all classes, and if any portion of the aristocracy take up your case and that of thousands of others, the act will be like charity, it will cover a multitude of sins. It matters not from what motive, if they do good, and I shall hail it is an act of justice to a class who have great need of protection. We shall, however, see the result; in the meantime, if you can procure any other honest way of earning a livelihood, I strongly recommend you to do so, as your business is the spring and source of your affliction, the cause of long suffering and premature death, the ruin of virtue. health, and happiness, and one of the leprous blotches on the character of a christian community. May God help you! You are without the pale of the law, the reach of medicine, or the aid of my profession —the victim of a grinding, unrelenting, and insatiable usury."

DIGESTION.

CHEWING AND SWALLOWING FOOD.

HAVING conveyed to the reader a general idea of the organs which nature has designed to fulfil the duties of digestion, we shall now instruct him in the mysteries of the process by which it is effected.

An appetite, or desire for food, distinguishes all living things. The food, having been prepared, is placed in the mouth. The process of chewing, and the form of the teeth by which it is directly effected. are so very generally understood, that any lengthened observations on these points would be tedious in the extreme. The most important points connected with chewing, or mastication, are, to have it done well, to bruise and mix any nutriment sufficiently with the saliva, or spittle, and never to swallow it until such process has been well performed; because bolting half-chewed food is a card of invitation to the horrible train of sensations known by the term *indigestion.* Many people, no doubt, can eat or swallow their food quicker than animals, and have stomachs as strong, to digest the crude mass; but everyone who has any respect for a quiet night's rest, and a peaceful day of enjoyment, will avoid such half-finished work as he would a bailiff on his threshold, whose only object is to levy a warrant of distress on the furniture within. We shall at another period speak of the teeth. In the meantime, we suppose a man to have swallowed his dinner, and that we are following the meat, to find out the way in which digestion is carried out in man's body. We premise, in the outset, that the first step towards a good digestion, is a good appetite; the next is prime food; and the third is to chew it well. The reader must remember, that although hens have gizzards, and eat sand to grind their food, man has no apparatus of the kind. His mill is composed of the set of teeth nature

has given him. Animal food does not require so much chewing as vegetable; and a cow might teach one that when it discusses a turnip, even having the advantage of chewing the cud afterwards.

Man is not like a whale, which has no teeth, nor is he like an ox, which has four stomachs, as it is commonly expressed; nor does he possess the voracity of the tiger, which swallows bones unbroken. Man can eat and digest both vegetable and animal substances; all we want to show is, that he must chew neither too fast nor too slow —neither too long nor too short; but just until the food is well mixed with saliva, and fit to be swallowed with ease. The whole process of chewing and swallowing is mechanical; but it has been proved that the saliva is a most important ingredient in the process of digestion. Once the mouthful of food is properly mixed with the saliva, it is transmitted into the gullet, which is a round tube formed of muscula, fibres, the one set stretching lengthways, the other in a circular direction. The inside of this tube is lined with a soft membrane, provided with little follicles or bulbs, something like dots on a goose's skin, from each of which oozes an oily matter, to facilitate the passage of the bolus of food.

When the bolus enters the upper part of the tube, the muscular rings contract and force it on. Of course, this action can be reversed, and food ejected again, by tickling with a feather, or should any obstruction suddenly exist. Some people may deny this, and say, when we eat, does not the food fall down the throat of its own accord?—what is the use of troubling us with long yarns of anatomical learning on such a simple subject? Aye, but let a man stand on his head, and he can then drink, and eat, and swallow, upwards, both drink and meat! What can they say of things going up hill? The fact is, that everything that nature does, is worthy of close observation, and always elicits admiration. Here we have nature giving children no teeth, because chewing is not wanted, and food that required chewing would not agree with them, unless it were bread and milk. Such food common sense tells us to chop down with a spoon. Again we have teeth produced, just when food that must be chewed is most likely to nourish the body. Then we have also different kinds of teeth; some to tear—some to grind; all showing that man may eat both vegetable and animal diet. We have also the saliva, or spittle, to mix with the food, and render it ready for the stomach. We have the gullet, or tube, ready to carry food down to the stomach. And we say emphatically, that unless people make use of the teeth nature has given them, and properly chew their food, when they have any to chew, the nutriment will remain in the stomach, creating sickness, uneasiness, and debility, or be sent on into the intestines, to create colic, wind, looseness, diarrhœa, inflammation, or cholera. The old adage becomes then applicable, that every morsel should pause before it leaps, or, at least, that everyone who has not the stomach of an ostrich, which can make a feast on horse-shoe nails, should remember that it is no laughing matter to put nature in a bad temper, by obstinately sending in upon her unmasticated food, which incurs, ultimately, the pains and penalties of indigestion.

THE MEDICAL REFORM BILL.

NO. III.

FIRSTLY:—Sir James Graham's bill repeals all acts and alters all charters to the colleges which may interfere with the provisions of the new bill.

SECONDLY:—It appoints a central board on council of health.

The *constitution* of this council is very important to the public. It will consist of the secretary of state, the royal professors of medicine appointed by the crown in the universities of Oxford, Cambridge, Dublin, and those of surgery in Edinburgh and Glasgow: also of six persons to be named by the privy council, and a physician and surgeon to be chosen by the colleges of physiciana and surgeons, England, Scotland, and Ireland, respectively. There will be eighteen members altogether; but twelve will be under the control of government, without affording any security to the public for their efficiency: six only in reality represent the proe fession. Now, whilst we are of opinion that an infusion of non-medical opinions into the council would do no harm to the body we cannot subscribe to the entire control of its functions by the government of the day. Its constitution, to be worth anything, should correspond with the expanded opinions of the day, and its utility be guar anteed by a wide and efficient representation.

Such a board is, however, imperatively required to superintend medical education, examination, practice, and public health. It is needed to abolish the absurd and injurious privileges of the chartered schools, and to remove the tariff on the importation of whatever is excellent in Scottish or Irish teaching or practice.

We now pass to the powers of the council under the act.

Provision is made to insist on each licentiate being twenty-one each surgeon twenty-five, and each physician twenty-six years of age, before the council will register them as qualified to practise, No objection can be made to this, as very young men never get on well, and, besides, limit their sphere of study too much to assure great success.

All physicians and surgeons must belong to and have passed their examinations in some college, before the council will ratify their claims to practise; but, having once passed their examination in the college where they were educated, and having registered their names in the books of the council, they will be entitled to practise freely in all parts of the United Kingdom. And why not? Why should the College of Physicians, London, lord it over a territory of its own, and exclude Irish or Scotch graduates? All persons now in practice can avail themselves of the same privilege.

The council would thus correct the list of practitioners, as the courts purge the roll of attornies.

The council is to be empowered to correct the course of study, and, above all, to keep a tight rein on the examinations,—two most important points regarding the public safety.

The registered practitioner only will be privileged to fill public offices, will be protected from the old-wives intermeddling of the apothecaries' company, and the council will, on the other hand, have power to prosecute unqualified persons, as if guilty of a misdemeanour.

None, saved registered practitioners, can recover debts: no one can falsify his title, except under penalty.

We confess that we only see two faults :—the narrow constitution of the council, and the fees they demand for registration, both of which stamp it as a corporate jobbing scheme, recommending itself to public approval under the mask of many useful reforms. We repeat, in conclusion, that the public needs a vast extension of medical knowledge,—that the profession requires only to be protected against its own narrow and restrictive policy, —the policy of monopoly. *That* once broken down, a board of control will, if appointed at the rate of twelve by the profession, and six by the commons, secure a perfect system of medical education and examination, a perfectly free and equitable right to practise by all qualified persons. The abolition of all restrictive monopolies, a fair field and no favour to all comers, the extinction of quackery, and the preservation of public health by sanatory laws, recommendations, and advice, which no other constituted body ever has effected, or ever can effect in Great Britain.

USEFUL RECEIPTS.

Costiveness.—An excellent stomach draught is composed as follows:—Tincture of rhubarb, one drachm ; and tincture of bark, one drachm. Mix, and take as a draught every alternate morning, until the evil is remedied.

Wounds, when slight, should be bathed with cold clean water. Place the edges of the wound close together, cover it with a little lint spread with the same ointment as that given for burns, and then bind down with a piece of sticking plaster ; but keep the common plaster from the wound, as I have always seen it cause irritation.

Warts are very common, and most unsightly things ; they are contagious. They may be eradicated completely by rubbing them every day with the herb known as the celandine or bitter-wort, which exudes a yellowish milk, very acrid in taste.

Cramp.—The French put iron in bed to prevent an attack of cramp ; and, should they have an accidental touch of it, they get up and place the foot on a cold substance.

Gregory's Mixture is well known in stomach complaints, indigestion, wind, &c. Take of best magnesia, three ounces ; Turkey rhubarb, one ounce : and ginger, half an ounce. Mix, and take half a table-spoonful in water two or three times a day.

Sore Nipples.—Melt in a gallipot, slowly, the three following articles :—white wax, hal fan ounce ; honey, half an ounce ; and oil of sweet almonds, one ounce. When melted, stir in two drachms of balsam of Peru, and apply a portion to the cracket nipple.

INVALIDS' CORNER.

"Amusement is conducive to the restoration of health."

THE POISONER.

(*Continued from page* 31.)

PART SECOND.

At the end of the street St. Antoine, where you observe at the present day a monstrous elephant and the column of July, there arose, in 1369, an enormous edifice, built by Hugues Aubriot, Provost of Paris. This building, flanked with strong and high turrets, and surrounded with broad and deep ditches, was called the Bastile Saint Antoine. It served at the same time as a fortified residence, a royal treasury, and a state prison. In 1661, that is to say, three years after the return of M. de Brinvilliers to Paris, the Bastile had already received a great number of prisoners. To be imprisoned within its walls, and there to pass the best part of one's life, or even die, it was not necessary to have dishonoured one's family; it was only necessary to be important or importunate, a vigorous writer and an enemy to the nobility, the father of a beautiful child, or the lover of a noble lady; then, in either case, without any other legal ceremony, one of the provost's officers arrested you by presenting to you a *lettre de cachet*, or a letter bearing the official seal, and then he would conduct you silently to the Bastile. If you asked any explanation they were silent; if you resisted they bound your limbs; if you abused the royal archers they gagged you; and, once within the Bastile, you were placed during eight or fifteen days in a damp cell, sunk thirty feet under ground, whose walls were streaming with filthy water, and whose floor was crawling with reptiles.

Such was precisely what occurred to St. Croix after his presentation to the Marchioness de Brinvilliers by her husband.

St. Croix, overjoyed to have found in the Marchioness her whom he had loved under the name of Marguerite, spent the greater part of his time in her society. He attended her in her walks, and to the theatre. He followed her to the country, and sat beside her in her carriage, being afforded every opportunity through the dissipation and amours of the Marquis. One day, whilst they were at Picpus, they set out to visit the celebrated convent of the penitents of St. Francois: an officer in the provost's livery stopped the coach, and very politely requested St. Croix to follow him. Without any suspicion he left the Marchioness, and accompanied the stranger into a narrow lane, where four archers seized upon him, and compelled him to enter a carriage. Indignant at such treason, he endeavoured to use his sword, but it was gone! He asked why he was treated in that manner, and for what crime. No reply was made. Twenty times the same question was answered by the same silence. Worn out with such obstinacy, he was about to pull up the blinds and shout to those who might be passing, when four vigorous arms pinned him to his

seat. The carriage rumbled on, and finally stopped at the entrance to the Bastile.

On a signal being given, the bridge was lowered; the carriage passed under an arch and entered a long court-yard, on the side of which were the guard houses, and shops of the various dealers in eatables, &c. Describing a curve, a second bridge was passed, and they stopped in the court of the keep, or chateau, amidst a host of soldiers. The archers caused their prisoner to descend, and introduced him into a lower room, separated from the apartments of the governor by a thick wall.

"Take that," said St. Croix, knocking down two of the archers who were about to search him. "Will you tell me why I am arrested?"

The archers made no reply.

"There must be some mistake, for a captain of the regiment of Tracy, who has faithfully and zealously performed his duty, cannot be thus deprived of his liberty."

A short stout personage, whom St. Croix conceived to be the governor, in consequence of the honours rendered to him, arose and approached him. He examined several papers which the officer had brought with the prisoner, and in a sharp voice remarked,—

"M. St. Croix, you are arrested in the king's name by order of M. Dreux d'Aubray, civil lieutenant of the city of Paris."

"The traitor!" exclaimed St. Croix, grinding his teeth: "but what is my crime?"

"What is your crime?" cried the astonished governor: "what is your crime? They will tell you that by-and-bye." And plunging his fingers into a gold snuff-box, he disappeared.

To be continued.

ANSWERS TO CORRESPONDENTS.

T. E. G. Brighton.—He ought to be aware of the very old and effectual plan of curing children. It is, to take them up and plunge them in cold water. If he can get no one to souse a bucket of water over him, he had better procure from a good druggist the sixteenth part of a grain of st ichnine, or one grain divided into sixteen parts; take one of these powders every alternate night, and on the night when strichnine is not used, take a quarter of a grain of opium. Keep the bowels open gently with four grains of extract of colocinth, and write in the interval.

P——t, Manchester.—We have promised to answer all correspondents through our columns, but we cannot do so in this case. In all cases of private correspondence with parties who cannot have answers in the Family Doctor, or who do not wish them, a charge of 2s. 6d. will be required for advice, postage, &c.

H——*l*, Carrington.—Infusion of gentian root, one wineglassful every morning.

N.B. Medical advice will always be given to any person, gratuitously, through the pages of the Doctor: but it is necessary to give age, sex, employment, symptoms of disease, length of its duration, together with the most probable cause, or at least to describe the commencement of the attack. If private advice, by letter or otherwise, is solicited, it will be attended to; but any one may have advice through the above medium, viz., answers to correspondents, without the necessity of giving their names, or the possibility of their being made known: only, there may be questions which we shall decline answering in our pages.

THE
FAMILY DOCTOR.
ILLUSTRATED.

No. IV.] JUNE 28, 1845. [PRICE 2*d.*

WILLIAM HARVEY

Was born at Folkstone on the 1st of April, 1758, and after having been some years as the grammar-school of Canterbury, was admitted at Caius College, Cambridge, in the year 1593, being then in his sixteenth year. Having devoted himself to the study of logic and natural philosophy for six years in that university, he removed to Padua, at that time a celebrated school of medicine, where he attended the lectures of Fabricius ab Aquapendte on anatomy, of Minadous on pharmacy, and of Casserius on surgery. He was admitted doctor of medicine there, and returned home at the age of twenty-four. At thirty he was elected fellow of the College of Physicians, and shortly after appointed physician to St. Bartholomew's Hospital. On the 4th of August, 1615, he was chosen by the College to deliver the Lumleian lectures on anatomy and surgery, and upon this occasion he is supposed to have first

brought forward his views upon the circulation of the blood, which he afterwards more fully established, and published in 1628. In 1623 Harvey was appointed physician extraordinary to James I., with a promise of succeeding on the first vacancy to the physicianship in ordinary, the duties of which he actually performed. He was afterwards physician to Charles I., and was in the habit of exhibiting to him and to the most enlightened persons of his court the motion of the heart and the other phenomena upon which his doctrines were founded.

The latter years of his life were chiefly spent at his country-house at Lambeth, or at his brother's, near Richmond. In 1654 he was elected president of the College of Physicians, but in consequence of his age and infirmities he was induced to decline that honourable office. But he testified his regard for the society by presenting them with his library, and conveying over to them, during his lifetime, a farm which had been left him by his father. He died on the 3rd of June, 1657, in the 80th year of his age, and was buried at Hempstead in Essex, where a monument was erected to his memory.

FAMILY COMPLAINTS.

Ear-ache.—sometimes arises from slight inflammation, on which occasion a little tepid water, in which a teaspoonful of laudanum has been mixed, should be poured in. Insects sometimes penetrate within the ear, whence a small quantity of olive oil will displace them, no insect being able to endure its presence. We have known cases of insects in the ear produced by persons sleeping on the grass. We have also known instances of ear-ache in which a violent inflammation took place, accompanied with fever. A blister on the back of the neck is then necessary; the bowels should be freely opened, or even leeches applied behind the ears, which are often the most effectual. Hardened wax sometimes gives rise to this painful complaint, for which a few drops of olive oil and the syringe should be employed. In rheumatic affections, a seton should be inserted in the neck, and kept open for a month.

Asthma is sometimes produced in various trades where there is much dust and flakes of matter flying into the lungs, impeding the circulation of air, and causing a constant irritation of the mucous membrane. It is also natural to some people, and runs in families, like the king's evil. In cold, damp countries, and in moist, foggy localities, asthma is very common. Any one may recognize a case of asthma by the wheezing sound emitted when the patient breathes. There is often a short and difficult cough, sometimes accompanied with expectoration. The face, during an attack, becomes pale, the extremities cold, and the pulse small and quick; the patient seems as if he were dying; but there is no real danger in the case. In a few minutes, or perhaps hours, the attack subsides. It generally, however, takes place in the middle of the night, or from that to two or three o'clock in the morning. The attack assumes the form of a paroxysm, the patient starting up and hastening to the window. The flatulency, or presence of wind in the stomach, is another remarkable feature. The variety of forms assumed by asthma is endless; some having an attack several nights in succession—others having the complaint only during foggy weather—whilst others, again, are constantly wheezing after slight exertion or sudden emotion. Thin people have mostly spasmodic asthma, whilst stout people have asthma combined with a chronic affection of the chief passage of the lungs. Under all these circumstances, it would be very difficult to point out the *real causes* of asthma; but there can be no doubt of the structural alteration in the lungs, in old standing cases, in which a *post mortem* examination has taken place. *Treatment*—Mere change of air, climate, or locality, in some cases effect a speedy cure. Some people, however, are free from an attack in London, while others have one the moment they come into it. Many persons whom I have known, were entirely cured on emigrating to America,—the cause being, undoubtedly, the dryness of the climate; but whether, in the dry spasmodic asthma, the same result has been observed, remains to be seen by more extensive investigation amongst the British

emigrants. I have known people return to England, and have an attack the moment they entered our moist climate. In short, a great deal more attention must be shown in regard to asthma before we can arrive at positive conclusions The complaints is common—seldom fatal of itself—and therefore people do not call in medical men, as would be the case in more fatal complaints. The sphere of observation is consequently limited, or at least has been so until within these ten years back. If the patient is of a full habit, bleeding has generally been found beneficial in producing relief; but it must be recollected that the effect is only temporary, and the desire for bleeding may become a thing naturally established, as I knew in the case of a carrier, who always would be bled, in spite of all that could be said or done. Laudanum has been given in doses of from forty to sixty drops, and even more, before the paroxysm yielded; but I am inclined to think that the larger doses spoken of, must have contained very little good opium. Laudanum must be given cautiously to people who are plethoric, or have great sense of fullness in the chest. Half a teaspoonful of either, added to the laudanum, is an improvement. After the attack, the best thing is two or three assafœtida pills, combined with a grain, or even two, of solid opium, according to the extent of the irritability present. Some people find vast relief from smoking stramonium, the leaves and stalks being chopped down: we have also seen the same take place from drinking strong coffee and tea without milk or sugar,—some people preferring the one, some the other Many smoke tobacco with advantage. Indeed, people generally soon discover what is best for themselves, as it would be impossible to point out one remedy that would act alike in many cases of this very variable and distressing affection. We may conclude these observations by advising those who are troubled with asthma as to the means of preventing the attacks. One man informed me that he generally succeeded in saving himself from an attack by taking several drops of muriatic acid in cold water. The most excellent thing we ever witnessed was tar-water,—that is, hot water poured over, say a pound or two, of common tar, in the proportion of a gallon or two of water. Stir with a stick two or three times a day; repeat that during two or three days, and when the sediment has fallen to the bottom, drink a wine-glassful of the tar-water twice a day, increasing it to three times a day. One great thing is to keep the bowels always regular, and to take care to avoid everything which puffs out the stomach, whether food or drink. If an attack approaches after a haerty meal, a vomit should be given at once, to clear out the stomach. Galvanism has also been found highly beneficial. Weak people should use a tonic, after the attack,—the carbonate of iron, ten to twenty grains, twice a day. Change of climate is the most important, as we have already remarked; and that, with the other remedies, should all have a trial before any one resigns himself in despair. We may remark, in conclusion, that an asthmatic patient should be seen before any decided line of treatment for cure or prevention can be safely advised. We have, however, described the majority of the remedies considered the best.

Monomania.—A Lusitanian physician had a patient who insisted that he was perpetually frozen, and would sit before a great fire during the dog-days. The doctor dressed him in rough sheep-skins, saturated with brandy, and set him before the fire, when the patient declared he was quite warm enough,—rather too much so, and was cured. Many people fancies themselves earthen pots, and carefully avoid being touched, lest they should be broken, Some consider themselves teapots, and hold out their arm fer the spout. In these unhappy cases of mental delusion, it is generally necessary to humour the patients, whilst they should be treated for an inflammatory affection of the membranes of the brain. The brandy applied along with the sheep-skin, no doubt acted as a huge blister, and in that manner counteracted the inflammation within.

Pimples.—On the Continent the following is employed with great advantage:—One drachm of tincture of cardamoms, fifteen drops of ipecacuanha-wine, and as much flowers of sulphur as will lie on the surface of a shilling. Take the mixture in a glass of weak wine, at bed-time every second night.

Lemonade Powder.—Powdered citric acid, one ounce; white sugar, seven drachms. Water, to make agreeable.

Antibilious Pills.—Powdered aloes, one ounce; gum-mastic, a quarter or an ounce; oil of absynth, one drachm; tincture of aloes sufficient to beat into a mass. Five grains to a pill; two pills to a dose. Not to be used by persons who have piles.

Piles.—Reduce a gall-nut to powder; infuse the powder in two-pennyworth of olive-oil during the space of twenty-four hours. Apply the composition with a feather, or piece of lint. Take seidlitz-water as a purgative, and drink liquorice-tea.

DRINKS.

Wine isdecidedly less nourishing than home-brewed ale; nor is it to be procured pure, except by the wealthy. It is, when adulterated, the source of many maladies affecting stomach, kidneys, and the nervous system. Brandy and grain spirits should be used sparingly, as they are generally too new. The Irish call the grain whiskey the *fighting whiskey*, from the nervous effects it produces amounting to temporary madness. The same may be said of gin; the thin cadeverous contenance of the habitual consumer of the latter stuff, proving its injurious and brutalizing effects. Sound ale, made of malt, hops, and water, is far more adapted to the inhabitants of this climate; but in that we have mangel-worsel, creating a terrible nervous emotion. Ale is not, however, suited to delicate stomachs, from its being, as it is termed, heavy, Tea and coffee hasten digestion, but render it always imperfect. Coffee should never be the beverage of thin persons who are of a nervous temperament, and sleep badly. We shall enlarge on these points under the head diet, after digestion.

THE ABOMINABLE PICTURE NUISANCE.

The vendors of infamous prints among young boys and girls, at one penny per lot, have at length assumed such a frightful height, that we feel bound in duty to hold up the system to public indignation. The other evening, on passing Blackfriars Bridge, our attention was attracted to a crowd of boys and girls gathered around a print-vendor, who had his blackguard productions, in a box slung round his neck, for sale. They were, from the casual glance we had of them, calculated to do irreparable mischief to the moral of the rising generation. Amongst the group of devouring observers, we perceived several of the Blue-coat School boys. The cholera had far better be introduced to the school at once, or any other physical scourge which has devastated society, than such a moral plague. The virus is worse than that of the small-pox, and will produce far worse ravages on the fair face of innocence. Youthful imagination should never receive the slightest stimulus; for if it does, every professional man knows, from sad experience, that the future evils are like ulcers, which spread from a minute beginning, until the whole mental and physical energies of man are prostrated and destroyed. Besides, the source of youthful depravity may often be traced to schools; having its beginning, again, in the slow and secret dissemination of such prints. The anxious care of the father, the watchful vigilance of the mother, and the paternal superintendence of the master, are all in turn evaded, and oftimes rendered useless. The manufacturers of such things, the vendors, the police, who do not arrest them, the law, which does not punish them, and the government, which does not put the sys- down, even the public, who are aware of such proceedings and do not bear testimony against them, are all guilty of the neglect of a great moral duty; and they aid and assist, by their silence and inactivity, in the propagation of incredible calamities. Let each parent suppose such prints are placed in the hands of a son or a daughter; let each brother imagine the same things being handed to his sister, or a husband to his family, and all will surely exert themselves to cut off, in the very bud, a thriving trade, which is nourished by the pollution of society, and upheld by the moral iniquities of the rising generation. No police, of course, were near to arrest the blackguard; and when one of them was informed of the circumstance, he said, "It was of no use; for they kept look outs to announce their approach!" Where is the boasted detective? Why cannot policemen, in plain clothes, be employed on that especial duty? We are sure that no one would grudge the charge made for it; but, on the other hand, every right-thinking man, who looks beyond the veil we have considered it our duty to raise but partially, would cheerfully assist every officer in doing his duty.

Dumoulin, in his last moments, when attended by three of his brother practitioners, remarked:—"Gentlemen, I leave behind me three excellent physicians. (Each imagined himself one of them.) They are, Water, Exercise, and Temperate Eating."

SCARLET FEVER CURED BY COLD WATER. AFFUSION.

DR. GREGORY TO DR. CURRIE.

This day se'nnight (1st November) my eldest son, a boy of six years of age, of a sanguine temperament and very irritable constitution, was taken ill about noon, when out at his walk. Your friend Benjamin Bell saw him before I did; for having called upon me to speak about a patient, he inquired for my wife, and found the child with her lying on the settee. She anxiously begged of him to examine the child, and see whether he had the scarlet fever, which she suspected to be the case.

Mr. Bell had no difficulty in pronouncing the disease was the scarlet fever; for even by that time (within two hours from the invasion) the eruption of red prominent points was very copious and evident, so as to give a general roughness and redness to the skin of the breast. In that state I found him soon after Mr. Bell had left him—his pulse frequent and small—his skin but just beginning to grow hot--and his hands rather cold.

He complained of general oppression, uneasiness, and headache.

The velum pendulum, uvula, and tonsils, were of a purple red; but there were no ulcers aphtea on them that I could see.

Before six at night he had much more severe headache and oppression, with nausea, vomitting, and diarrhœa; his pulse a hundred and forty and very strong; his skin very hot, and of a bright red; with a considerable degree of roughness all over it. Conceiving this to be a case of immmediate danger, and in every respect proper for your cold practice, I lost no time in getting him taken out of bed, stripped, and set erect in a tub, in which situation I poured a gardener's watering-panful of cold water all over him from head to foot. This relieved him a good deal, and, as you may believe, cooled him very effectually; but before ten at night, the symptoms had returned with more violence than ever. His pulse was one hundred and fifty, and very strong; his face turgid; his eyes growing red; his skin red from head to foot; and very hot.

I did not measure the heat of his skin by the thermometer; but I think it must have been at least 204 degrees of Fahreneit. I immediately repeated the cold water affusion as before, and with the same good effect. He was immediately cooled and refreshed, and in half an hour I found his pulse at a hundred, and the heat of the skin very moderate.

He had a pretty good night; but before eight next morning was become very hot again, on which account the affusion was repeated in the same manner.—He said he did not like my way of bathing, and would rather bathe in his own tub; and as I thought, from the state of the symptoms, that there was occasion for it, he was bathed in his own tub and fairly laid under water over head and ears, between eleven and twelve at noon, and again at six in the evening, and at two on the second day. These five good

sousings, in twenty-four hours, seemed to have done the business completely. The eruption was not repelled; but the progress of the local affection in the throat seemed to be stopped. I could never see any ulcerations in it, though I looked carefully for them in consequence of having observed much fœtor of his breath, on the second evening.

The force of the fever as to heat, and frequency and strength of pulse, was quite broken after the fifth ducking; to such a degree, even, that I began to have some fears that the vis inertia might fail, and I actually provided wine to be at hand, to give him from time to time, in case of need; and I saw him several times during the night between the 2nd and 3rd days of his disease.—But I found no occasion to give him any of it; nor has he had a grain of medicine, or even a drop of wine, during his illness; so that you must allow it to have been a very fair experiment of the cold affusion as a remedy for the scarlet fever. His throat was quite well the morning of the fourth day; the same day, he had some slight swelling of the hands, but not the twentieth part of what I have often seen after a severe attack of the scarletina.

He is losing his cuticle by desquamation, as was to be expected: he has been washed with tepid water and soap for three or four nights to promote that desquamation, and relieve the itching of his skin. He has not yet recovered his flesh, strength, or colour; but seems in a fair way to do so soon; for he has a keen appetite and digestion. This is only the ninth day of his disease. You may be sure from the detail that I am perfectly well pleased with your practice in this disease, and that I shall gladly follow it in any proper case of the same kind that may come under my care, if I am allowed to do so. It is more than probable that I shall soon have occasion to try it on two others of my sons, one of them past four, the other of them almost two years of age, and both of them of the sanguine temperament of their eldest brother. Both of these young children were exposed to the contagion from their cousin, as my eldest son was, and both of them were with him when he sickened, and for two hours after; so that I could have no hope of preserving them from the contagion; they have both had the cow-pox.

Wednesday.—Yesterday afternoon the youngest of my sons also sickened, and had the usual symptoms of oppression, sickness, vomiting, diarrhœa, frequent crying, frequent pulse, copious red eruption on the skin; in less than three hours after he began to be uneasy, flushing of the face, and increase of heat; his voice is somewhat affected, and hoarse; but he swallows liquids and solids without difficulty; so that I have no great fears for his throat. Though he was never so hot as his brother, he was washed in a tub with cold water about 7 o'clock, and again about 11 o'clock last night, and twice to day already, with tepid water, as he was still less hot than yesterday, and his feet even cool. He has been relieved by the washing all the four times, and has always gone to sleep after it for a longer or a shorter time.

My other son (the four year-old gentleman) has not yet sickened, but I expect him to be taken ill to-night or to-morrow; for last night he had very little sleep, and frequently through the night, and to-day, he has complained of being tired. "Lassitudo spont. morbus denunciat," is one of the oldest maxims that I know of in physic. Whenever he sickens, I mean to treat him as I have done his brothers.

Yours most truly,

J. GREGORY.

10th Dec., 1803.

(*To be continued.*)

THE MINERS.

How can the air be carried round all the cuttings and passages, so as to ventilate the whole? When the air enters the down-cast, or down-draught shaft, it is directed through the workings by artificial means, such as solid stoppings, having double doors where there is a cross passage required for the business of the mine, and where a more solid barrier cannot be used. One current of air is also crossed over another, by the same means. The air is kept in a channel of its own, from the down-draught, and made to travel through many miles of passages, mingling with and diluting the gasses, and then returns to the up-draught, carrying out the impurities. Of course, the two currents must not mingle, or the pure air be permitted to reach the up-draught until it has thoroughly performed its purpose; at least, such it is intended to do, and should be made to perform; and where the mechanism of ventilation is strictly attended to, the current travels many miles an hour, and becomes, at times, too strong to be agreeable to the colliers. The trouble, however, attending the double doors, stoppings, &c., causes the current to be destroyed, or turned from its proper course, owing to the criminal negligence of miners and the avarice of many owners. The reader will now understand something of the process of ventilation, and will recollect the two things absolutely necessary to be watched with great vigilance—first, the proper drainage, and secondly, the thorough ventilation, of a mine.

We shall now advance to the working of the coal itself, and try to discover the manner in which large supplies of gases are at times suddenly evolved. The solid coal has passages cut into its bed: one line is four yards wide, the other two. These cross each other, like the lines of a draught-board, at right angles, and leave pillars standing to support the roof. There is little chance of explosion in this process, as the air sweeps against the coal where the miner is at work, and neutralizes the gases evolved. The great source of danger seems to be in cutting away the pillars, which are generally twenty-two by fourteen yards in thickness. These are left standing until ordered to be removed. The miner then cuts across and through one of the thick pillars of coal, dividing it into four equal

parts. One part is cut entirely away, the roof being supported by props of Scotch fir, to the number of one or two hundred, as may be required. The next process is to remove the timber props, a work of very great danger, because the roof, on their removal, falls in.—some portion of the wood remaining, as the pressure of the roof requires the props to be cut down and dragged away. The ruinous portion of the mine, caused by the fallen roof, is, of course, incapable of being either ventilated or drained ; consequently, wood, coal, and water, are left to be decomposed at leisure, and to generate the hydrogen gas with the same certainty and rapidity, that burning charcoal emits carbonic acid gas. Here, then, is the crucible or kiln from which proceeds the explosive material. It cannot, they say, all be ventilated, True; but I demand the reason why it was formed at all, so long as any portion of the bed of coal was being worked? I see no harm, if economy and demand require some of the pillars to be removed, why they may not be so ; but I see nothing, save punery and murder going hand in hand, when a bunch of Scotch fir sticks are removed, and the roof permitted to tumble in, and eventually produce gas enough to destroy hundreds, by the decomposition of the coal and wood in the damp of these *goafs*, or gulphs of destruction. Suppose two hundred trees used for props. Well, are these trees worth more than the coal whose place they supply? or, if they are, why not charge the value on the working of the mine, leave them standing, and let the coal be both scarcer and dearer? The props would not do any mischief standing ; but I maintain that wood and coal, singly or together, when permitted to decompose in water, must give rise to hydrogen gas. Let the pillars either stand in deep mines, until the bed is worked out, or remove the pillars and leave props standing ; and in both cases, the gas producer, the *goaf*, would be removed, consequently perfect ventilation be maintained until the bed was exhausted. The whole of the question seems to rest on the value of these fir sticks. We invite some practical miner to calculate the amount, in case alternate pillars were formed of wood and left standing. That is a miner's question ; ours shall be to point out the method of destroying the gas when formed, and of restoring human beings to life when apparently destroyed after an explosion, —that is, always supposing there has been no structural injury to account for death.

PLEASANT PLACE AGAIN.

The venerable stream continues to exercise a remarkable influence over the legs of every unfortunate weight who stumbles on its fragrant banks, unless his nostrils have been provided with plugs of snuff. But its results in point of generating disease,---for which it deserves a patent,---have induced the apothecaries to canvass a requisition for a public meeting, to be held with the view of presenting the commissioners with the freedom of their shops in miniature coffins. The sexton will take the chair, and Mr. Silverhandle, the undertaker, will move the second resolution, thanking the police-force for their silence as to this treasure of a ditch.

GOBBLE AND GABBLE.

"You do look a little better, Gobble, after that soot is washed off your face."

"It is not soot, my dear."

"It is a blackened cork, then, that your boon companions, as you call them, have rubbed over your face. Oh! they are men, no doubt, to send home the father of a family in that way. I only wish I had known it when I let you in by the moonlight. I only wish I had caught some of them."

"I came home myself, my dear. I fell asleep after winning the Ascot sweepstakes, and knew nothing of it when I awoke, perfectly well, and came straight home. It was a joke."

"Aye, a very fine joke! You need not deny it: you paid for the drink, like a fool: you spent at least two pounds. I wish all cups——"

"Tea-cups excepted, my dear."

"I wish all racing cups and drinking cups were put down by act of parliament."

"And a new Jack Cade, my dear, to declare it felony to drink anything but pop."

"You're incurable, Gobble: I see how it will be. There is a summons for taxes, too;—that must be attended to; and the rent, Gobble,—the rent."

"Oh! my prize will pay for all. I drew the prize, my dear."

"The more fools you had to deal with, Gobble, for twenty-one people to pay all their money to one of their number:—that's equality, and justice, I suppose. But they corked it out of you in more ways than one."

"Never mind a joke, my dear."

"Was it any joke, Gobble, to frighten me out of my wits? Who would have thought of fetching a light with such a bright moon? And who would have dreamed that you would have forgotten your temperance lecture so soon? Goodness gracious! I thought, when I awoke, and saw your black sooty face, a sweep or a negro had smuggled himself into bed to me. But I should never have looked, I assure you, but for little Tom. He went into fits at such a frightful figure. And you call these brutes fit companions for you? Fit companions, indeed, when you pay freely! Ask them to pay your debts; will they do that? Ask them to lend you five pounds, and you will see what these boon companions will be. Their faces will be black enough, depend upon it, then: but it is of no use talking. Some calamity will come out of it, and then you will open your eyes—not before, Gobble."

"I hope it will prove to be another sweepstakes."

"And I hope there will be no more blacking or blacklegs about you, Gobble, or you'll sweep all the steaks out of this house, and make a sweep of yourself into the bargain."

DIGESTION.

When the processes of chewing or mastication, and swallowing, are completed, the inner lining membrane of the stomach throws out from the small dot-like bulbs we have before mentioned, a mucous fluid, called the gastric juice, or juice of the stomach, This juice flows or trickles down its sides, they being of course distended by the presence of the food immediately after the latter touches them. The food is the stimulus which excites the grain-like bodies' to produce the gastric juice. The inner membrane is so peculiarly irritable in the stomach of an infant, that it cannot endure the presence of any other kind of food than the mother's milk. It is so tender, that nature seems to forbid the presence of any substitute for the breast. We sometimes, indeed, see children fed from a bottle, and from the spoon; but both are very precarious in their results. The latter probably succeeds better, from the mastication to which bread and other nutritious matters are subjected by the nurse, and the mixing of the substance with saliva. In grown-up people the mucous lining membrane may be irritated too much, and, consequently, its natural action subverted or deranged. In that case, the proper discharge of the gastric juice, without which digestion cannot be carried on, may be prevented or altered, and hence the lingering suffering of indigestion. Digestion, in fact, depends on the quantity of the gastric juice exuded from the surface. This juice becomes mixed with and insinuates itself amongst the food, whilst the irregular contractions of the circular and straight fibres of the stomach jumble it about, until a proper combination ensues. The gastric juice will digest and dissolve food contained in a perforated silver ball, proving that mere pressure of the muscular fibres is not all that is wanted in the process. Should any nutriment, like the fluid part of an unboiled egg, be placed on the stomach, or even milk, both become instantly solid, so that they may be arrested, and the gastric juice thoroughly soaked through them, before they are allowed to pass on into the intestines by the lower opening of the stomach. Should this occur, flatulency, colic, and even inflammation may succeed, or the food pass through the whole of the intestines undigested, or any half digested, creating vast irritation and uneasiness. Orange-peel, or the pips of an orange, wil pass off at times entire; and when children swallow them, then very great exci ement is perceived until they are discharged. Very irritable food will cause an unusual quantity of gastric juice to be discharged, causing acidity, flatulence, and imperfect digestion; so will fluids drank in large quantities to dinner. The stomach is too much distended, and the fibres being, as it were, paralyzed, imperfectly contract, on the fluid producing similar symptoms. Good livers always take little soup, and drink what they term "*something short.*"

The dissolving power of the gastric juice is so strong, that if a person were killed whilst digestion was going on, the juice would eat holes in the stomach. The living structure of the stomach prevents its doing so during life. The juice, then, of the stomach,

plays an important part on digestion. *First*, if the food is not properly chewed, the gastric juice will be brought more slowly and imperfectly into contact with it. *Secondly*, the scarcity or superabundance of the gastric juice will materially affect the powers of digestion and the general health. It is the chief agent in dissolving food, and altering it so as to prepare it to supply the system with blood, its power being assisted much by the previous softening of the food by the saliva and the contractile power of the stomach itself, which tosses it about until it has been prepared and converted into a substance called *chyme*. The perfection of this change varies according to the different kinds of food, and generally requires some hours. After the salivary process, that of chewing and swallowing, mixing with the gastric juice, and tossing about in the heat of the stomach, which is considerable, the process of digestion is completed, and the food formed into a soft, pulpy mass and passed on into the small intestines, there to undergo further changes, which we shall follow throughout, MAKING USE OF CUTS AND DIAGRAMS WHERE THEY ARE NECESSARY FOR ILLUSTRATION.

THINGS AS THEY ARE.

LOUISE.

THE poor puppy Louise is dead, the dear darling pet.

"John, has Mr. Oakplank the undertaker arrived?"

"He is below, my lady."

"Send him up."

"Mr. Oakplank, you have done your duty, I presume."

"I have, my lady: I have taken the measurement, and wait your ladyship's orders."

"You will provide a substantial oaken coffin, covered with velvet, and silver fittings."

"Handles and nails the same?"

"Exactly, Mr. Oakplank; and see that the interior corresponds. Spare no expense."

"Will your ladyship desire armorial bearings?"

"Let me see—Louise,—aye:—Maria Louise:—that will do: let it be royal; for I shall erect a marble column over the remains of the princess of lapdogs. She came from the royal breed, too. Ah! it has been a dreadful shock, Mr. Oakplank!"

"Very, your ladyship. The doctor says, as I am told, there were no traces of poison."

"None whatever;—at least he says so; but, between you and me, I *differ* on that point: I think there must have been. How could she die otherwise?"

"Certainly, under all circumstances, it looks strange."

"Very, Mr. Oakplank,—very! However, you will attend with your men on Tuesday, and see that everything is properly conducted, out of respect to poor Louise. Oh! dear! I am affected now. You may retire, Mr. Oakplank."

"I wish your ladyship very good morning."

"Oh dear! oh dear! ah! ah! Fanny, the smelling salts and a little cordial. There; I feel better. I wish, Fanny, public opinion, and that press, were out of the way, I would bury Louise in a very different manner. Why should not she have a Christian burial as well as the mob? Well, well, we are not allowed to do as we like, even if we pay for it."

"Nasty beast!" said Fanny, aside: "I am glad it is out of the way!"

DICKORY.

"So, governor," said Mr. Pinchem, a guardian, "old Dickory is off your hands at last: soon have his place supplied in the union again."

"Hope not," remarked the young doctor: "never had such a troublesome patient in my life."

"Gave him a kick down hill, doctor, eh? Never mind," said Pinchem: "would you could do the same for all of them; but that would spoil all our trades; ha! ha! ha!"

"Why," remarked the governor, "we will always have poor until——"

"The island," observed Pinchem, with a grin of satisfaction, "is twenty-four hours under water; and that, doctor, would be the best way to physic 'em."

"Cold water cure: don't approve of it. You don't want Dickory opened, I suppose?"

"Oh! dear, no," exclaimed Pinchem: "no necessity."

"I merely want a preparation of a diseased heart; and I think ——"

"In that case, take the whole body and bottle it up," quickly chimed in Pinchem. "It will save us a coffin."

"There's a child dead, too," observed the governor; "and two coffins must be made, although I think the orange boxes, which we had some loose articles sent up in, would answer."

"Very good, capital! What does it signify, after all? Let it be so."

"But, gentlemen, you forget public opinion; and that tattling, meddling press, you recollect."

"That I do, doctor," ejaculated Pinchem. "From all such good Lord deliver us. That alters the case."

"There are two cases to alter, Mr. Pinchem.

"Why cannot the two boxes be knocked into one?" observed the governor, hesitatingly; "and with a little black paint, and the two inside, we might get over it and do no harm to ourselves nor the parish."

"Capital idea, governor; Don't you think, doctor, he is a great treasure to us?"

"I would advise you, Mr. Pinchem, to take good care of your treasure this time; for should public opinion——"

"D——n public opinion?"

"Or the thundering Times! The press——"

"D——n the press! cannot we do as we like with the cattle we have to deal with? You look after your patients, doctor."

"And the double case too, if you like, Mr. Pinchem, good-morning."

Colic.—The French administer the following mixture, even to women after confinement, with considerable advantage, as they announce, in all cases :——Beat up two spoonfuls of olive-oil in one of good brandy, adding enough of sugar to sweeten it. There certainly can be no danger in employing it.

A Frenchman, who had acquired fame and a name by preparing wonderful water for unhealthy eyes, departed this life so unexpectedly, as to leave his wife bereft at once of himself and his recipe. After shedding bottles of tears from her own eyes, the widow tried all manner of ways to prepare bottles of water for the eyes of her customers, but all was of no avail. Her efforts seemed only to remind her of the days that were past, and to give her customers an opportunity of getting well without lotion. She then conceived that, as she must endeavour to retain her customers, the next best thing to doing them no good, was to do them no harm. She coloured plain wrter so as to resemble exactly the celebrated preparation of her lamented lord of the lotion bottle, and advertised it as an improvement upon the original. Her fame was extended, and her fortune made. When on her death-bed, the reproaches of conscience wrung from her the secret; but her confessor soon comforted her, as he had long been in the habit of classifying medical practitioners under two heads:—first, those who hurried people out of the world according to the strict rules of art; secondly, those who allowed people to take their own time, and only gave them physic at the last.

ANSWERS TO CORRESPONDENTS.

G. H., Southampton.—Attend particularly to the diet, avoiding all food known by experience to disagree with the stomach. Let the food be mild and nutritious. Practise singing, talking, &c. Underdone animal food is best, with bread alone. Demosthenes practised his lungs, and succeeded.

Deformed, Kent.—Any surgeon can relieve him by an operation.

G. S., Liverpool.—It looks very like white swelling; but I would give up the iodine for a time. It seems to cause too much irritation, and should not be used where there is so much inflammation. Foment the joint well; apply leeches to reduce the inflammation; and keep the bowels gently open. The diet will rather favour you than otherwise,—not so the walking. When the inflammation is gone, a blister applied and kept open, would be beneficial, or the ointment of tartarised antimony rubbed in every night, which raises pimples all over the surface. Any druggist will make you up an ounce of it. Write again.

J. R., Manchester—We have known a similar sensation produced by use of tobacco and spirits on an empty stomach, especially where there was tendency to epileptic fits, which was his case, and not apoplexy. The bowels must be kept gently open with two grains of blue pill and three of extract of colocynth, taken twice a week. The hair should be cut short, and water discharged over the head every morning on getting out of bed. Avoid all indulgence in spirits or ale, and live sparingly.

John K., framework-knitter, Nottingham.—Same pills as above, thrice a week, and a cupful of infusion of senna and salts in the morning.

S. H. J., Belgrave.—Live temperately, but as well as you can. Have the bowels opened immediately two grains of calomel and ten of jalap: then see the result. When recovered, bathe occasionally, but not before or after meals. Take gentle exercise, and be perfectly regular in all your habits.

G. L., Little Bolton.—We thank him for his good opinion. If his statement is true, he need not be alarmed, as the feeling seems to belong to scurvy. See our article on that complaint in number three.

D. J. Bray, Woolwich, also congratulates us on the commencement of our publication, and considers it amuses while it instructs. He asks, "Are the digestive powers in action whilst running or walking?" Yes; and therefore no one feeds horses or dogs previous to exercise. Why should not man learn from them how to act? "Which is the proper position during sleep?" Decidedly the right side; because the heart has freer action than when reposing on the left side; and because, if one sleeps on the back, the pressure of the intestines on the great blood-vessels running up the spine, produces night-mare which arises often from impeded circulation;—a full stomach mechanically produces it, independently of its arising from disturbed digestion.

Adolescens is right in a physical point of view; and if not deeply smitten, or compelled by circumstances, should look elsewhere. Much, however, depends on the presence of hereditary disease on either side; for thatdoes not necessarily follow which he expects as a result. The crossing of the breed is undoubtedly the most in accordance with every law of nature.—Walker on Intermarriage may now be had of any of the medical booksellers for about 10s.

Joseph, Manchester, does not describe the nature of the rash, to enable us to decide whether it is itch or scurvy; we incline to the latter. Take vegetable diet, and use acids, keeping the bowels open with salts and cream of tartar in the meantime; and write explicitly.

J. J., Leicester.—Refer to article in number fourth, on "Asthma."

J. W. R., Ashton-under-Lyne.—We intend writing an article on deafness in number fifth, where we shall describe all kinds of deafness, as it arises from various causes; and unless we knew the cause of his affliction, or something more about it, it might lead him astray to prescribe at random, and be only quackery.

L. L., Nottingham.—The pills having done their duty in removing the costiveness, should not be continued. Try a couple of assafœtida pills twice a week; take one pint of decoction of marshmallows, or of oak bark; and add to either two drachms of sulphate of zinc. Use this as a wash, night and morning, but see that the bowels are never allowed to be costive. The diet may be generous. There is one important point he does not mention anything about. State only the symptoms which continue.

Delta ought to have been more explicit, and to have stated the cause.

R. K., Kentish Town.—The tumour over the eyelid should be cut out: the the puncturing with a needle is not only more painful, but utterly useless. We presume it is loose and hard. We have seen many of the kind.

T. J. D., Dublin.—We recommend him to try the receipt for pimples, and attend to the bowels.

THE

FAMILY DOCTOR.

No. VI.] JULY 12, 1845. [Price 1*d.*

SIR BENJAMIN COLLINS BRODIE, BART.,

SERJEANT-SURGEON TO THE QUEEN.

Sir B. Brodie is the third son of the Rev. Peter Bellinger Brodie, M.A., Rector of Winterslow. Sir B. was born on the 9th of June, 1783, and he, together with his brothers, received a private education, having been brought up altogether in his father's house. Mr. Brodie took great pains with his children, and Sir B. has always said that he is mainly indebted for the success he has met with in life, to the habits of perseverance which his father enabled him to acquire.

Sir B. C. B. commenced his professional education under the tuition of the late Mr. Wilson and Mr. Thomas, who at that time were teaching anatomy at the Hunterian school in Great Windmill-street. In 1808 he was appointed assistant to Sir Everard Home, surgeon to St. George's Hospital, by which he had the good fortune

of obtaining an important public trust very early in life, more than a year and a half before he thought it worth while to put his name on his door as a candidate for practice. From this time he had the principal charge of Sir Everard's patients at the hospital. Sir B. Brodie filled the post of assistant surgeon for an unusually long period, not being elected surgeon until the resignation of Mr. Griffiths in 1822. About six months after his appointment as assistant surgeon, he made his debût as a lecturer on surgery, and he continued to give to a large class a regular course until 1830. He received the appointment of Professor of Anatomy and Surgery to the Royal College of Surgeons in 1819, and held this office until 1823. He was elected a Fellow of the Royal Society in 1810.

Upon the death of Sir Everard Home, in 1832, he was appointed one of the serjeant-surgeons to the king. He attended their majesties George IV. and William IV., and is now serjeant-surgeon to the queen. Upon his appointment as serjeant-surgeon he had a baronetcy conferred upon him.

MODE OF TREATMENT IN CASES OF DROWNING.

On this subject we desire more particularly to give directions to those who are ignorant of anatomy, and who are generally unacquainted with the means to be resorted to in such cases. It was, and in many places still is, customary to hang persons up by the heels the moment they are taken out of the water, or to roll the body about like a cask. It is an error to suppose that persons are suffocated by the quantity of water taken, principally by the stomach, during immersion. The suspension of life is caused by the deprivation of air from the lungs, and the admission of a small quantity of water. The air must be poured in, rather than water be attempted to be poured out. Indeed, some people faint, and take in no water at all; besides, if the quantity of water supposed to be admitted did cause suffocation, the case would be hopeless. Hanging the head down, while the least spark of life remains, will, most probably, rupture a blood-vessel; nay, in life, how dangerous is the practice, without any immersion in water!

The body should be placed on a gentle incline, the head being a little raised, and carried in that manner. The body should be stripped as soon as possible, well dried, and, if possible, wrapped in flannel, as the great object is to restore the heat of the body. If naked, as in the case of an accident while bathing, some person should take off his warm coat and place it round the body. No crowd should be permitted around the person: on the other hand, the body should be laid in an airy chamber, and a fire lighted. From whatever source warm water can be procured, the body should be immediately immersed in it, and friction employed all over it. If the bath cannot be had, some one or two persons should get into bed beside the body, and rub constantly; or the drowned person should be placed on blankets before a fire, the same process being employed.

The soles of the feet should have some hot substance applied to them, as well as the arm-pits. Hot smoothing-irons, bottles filled with hot water, or bricks taken from behind the fire, are all of great service. Common salt, heated in a pan, which can soon be done, and tied in towels, is also eminently useful. Tobacco-water has been found, when used in rubbing, very successful; so have spirits; although they retard the friction, and act by a stimulus of their own, which should be particularly applied over the stomach and bowels. Tobacco-smoke, if forced into the intestines by the seat, acts as a most powerful stimulus; surgeons, however, can only apply that. But any one can throw in hot water and salt, by means of a common clyster-bag and pipe. The chief thing, whilst other things are employed, is to restore the action of the lungs by blowing through *one nostril*, whilst the other nostril and the mouth are kept closed. When the chest swells out, both the nostrils should be opened, and the air forced out of the lungs again by pressure with the hands of an assistant. A pair of bellows will answer well for blowing through one of the nostrils. When returning life is made visible, smelling-salts should be held to the nose, the palate tickled, and, if there is any power of swallowing, a little spirits or wine will be highly advantageous. All these should be resorted to when persons have been taken speedily out of the water, and life is still apparent. The friction, application of hot substances, and blowing in of air and alternately pressing it out again, so as to imitate natural breathing, should be continued *for two or three hours*, unless the frigidity and stiffness of death should announce that all hope is at an end.

It has been discovered in France, that a person who drinks a quantity of raw spirits, and applies his mouth to the nostril, instead of the bellows, can restore life sooner than by any other means. A regular drunkard was the first who proved it, by recovering nine persons who were given up after the utmost exertions of professional skill. This is most important to the public, and should be borne in mind in cases of accidents of this nature. Any person who drinks spirits at the time, on purpose, will, no doubt, produce the same result: and how many thousands would gladly, even if teetotallers, resort to that, to save human life.

[*The Humane Society's rules will be given next week.*]

HOW TO AVERT FEVERS.

When a dull heavy weight is felt in the head, accompanied with flushes of heat and cold, depression of spirits, loss of appetite, and disposition to sleep, sit, or lie inactive, as if in a stupor, the bowels should be opened by a smart cathartic, such as ten grains of jalap and three of calomel; after which a wine-glassful of salts and senna should be taken every third hour, until the bowels are freely open. The diet should be very sparing, and the drink barley water or lemonade. When the bowels are freely open and have ceased to

act, the indisposed person should be plunged in a warm bath, and then removed without drying, between the blankets, where perspiration will commence, and the patient feel a different person in the morning. If the person so threatened as above, is robust and able to bear a re-action of the constitution, a bucket of water should be soused over his head, instead of the warm bath. Treatment of this kind adopted, instead of waiting until the Doctor is wanted, (trusting to chance and the future,) would save many a poor creature from a lengthened sickness, and poor families from debts and difficulties,—to say nothing of the chance of the *bread-winner* being stretched on a sick-bed. There is always something alarming when a man does not eat, and, instead of going about his business, lingers at the fireside, or stretches himself, half sick, listless, and powerless, in bed, without knowing what is the matter with him. Open the bowels smartly, and don't wait to see what it is. It is either long sickness or death knocking at the door; *and it is best to keep both out as long as one can.*

EATING AND READING.

A TALL, sallow-looking young man came to me the other morning for advice, and seemed with difficulty dragging himself into the room.

"Well, what can I do for you?"

"Why, sir, I am labouring under a disease of the stomach."

"When did that begin?"

"Oh! sir, it has been coming on these several years back. I am a clerk in a merchant's office, and I think the want of exercise is the principal cause of my disorder."

"When do you go to business?"

"The time varies, sir. Sometimes eight, nine, and ten o'clock; and we continue at the desk often until six and eight."

"Well, that is not such excessively hard work; but tell me when and how you breakfast, dine, and sup."

"Why, sir, as for breakfast, I have a very poor appetite, and don't eat much; a slice or two of bread and an egg, with some coffee, forming that meal. I generally dine at a chop or eating-house, pretty early, not having been used to dine late. Then my appetite is better, and I enjoy it; but I fancy the immediate application to business disorders my stomach; and I experience a fulness and uneasiness, with heartburn at times, and often a complete incapacity for calculation or business."

"Do you read a newspaper at dinner?"

"Yes, sir, generally. It is the only time I have to read; and in these days we must make the most of time."

"Could you count out money with the left hand, and write an invoice with the right?"

"Certainly not."

"Then how do you suppose that the brain can attend to the

newspaper and to digestion at one and the same time? Does not the soul of business consist in doing one thing at a time,—that one thing well,—and having everything in order of succession?"

"Undoubtedly."

"Nature, then, is precisely of the same opinion. She wishes the business of eating, chewing, swallowing, and digesting, to be perfected one after the other; and, as the support of the frame is the chief end of eating, she expects that the brain will be permitted to occupy itself during a short space of time with these important duties; so that it may acquire vigour and power to direct the system in the performance of greater. How is it possible that a divided brain,—its nervous energy being bent on two duties,—can perform perfectly the duties of digestion? You eat a morsel; then read a paragraph; lay down the paper; and resume again. How would it be, if you danced about, in your office, from checking bills of lading to balancing accounts? I ask you how the firm would find its affairs at the end of the week? Suppose the porter to act as book-keeper; and you have an idea of the confusion which ensues from making the brain do the work of digestion and thinking at one and the same time. You must know that laughter is conducive to digestion, because it prevents the occupation of the brain with anything serious."

"But, sir, it did me no harm at first."

"I believe you. But the drippings of this pernicious system, based on the absurd idea of saving time, would wear you down if you were made of bronze. Look at the dreadful effects in America. Why, it terminates in madness, as it begins in folly. Your appetite is now in a great measure gone."

"It is; and my stomach is very delicate. I am bilious; nor can I occupy my mind so clearly as I once did. The constitution is broken down. I have tried amusement, too, in several of the singing rooms."

"Exactly:—that was finishing up the powers of the stomach by an evening's debauch, and accounts for your want of appetite in the morning. It is not to be wondered at that you are bilious and feel a sinking in the constitution. The whole springs from the disordered digestion, which was caused by a total want of the commonest rules as applied to business; as if pounds, shillings, and pence were of more consequence than the health of the system, or the arrangements of nature. Depend upon it, as the affairs of your house cannot go on without regularity and order, so the business of the system cannot be carried on without economising its powers and being punctual in its work. Eating, drinking, sleeping, and working, are the general heads under which nature is particular in demanding that each should have its place, its time, and its full and undivided share. Think of a man sleeping one hour and reading the next; and you will see the absurdity as well as dangerous tendency of eating your dinner and studying at the same time. Physical exertion is not permitted to a hound after a hearty meal. How much more fatal, then, is mental exertion to a man!

Eat your dinner as if you had no other business for the moment: eat it well: rest as long as you can afterwards, and before it too, if you have the chance. Let nature *do her work well*, and then be off to *yours*: you will be better fitted for it; and instead of trusting to physic, trust to common sense, and look to the old rule of there being a *time for every thing,—order for all.*"

PRECAUTIONS FOR JULY.

The extreme heat often induces people to throw off their upper garments, and to sit near open windows or door-ways, where the current of air plays upon the skin. It may be very agreeable for the moment; but the chilliness, not being natural or usual, considerable disturbance in the system is often created. Perspiration being checked, fever is apt to be induced, digestion impaired, or the liver affected. The same applies to bathing in cold streams when heated, or drinking cold drink when perspiring and hot. Children are almost sure to be in the sun, like kittens; but on no account should they be permitted to be exposed to the rays of a July sun, without some covering on the head, as brain fever may be easily brought on. People generally drink vast quantities of soda water, ginger beer, &c. Nothing can be more injurious, if taken in large quantities; as the powers of digestion are ruined by distending the stomach upon mere gas and wash. Taken in moderation, they will be found agreeable; but a lemon squeezed into warm or cold water is best; or a few drops of sulphuric acid added to a tumbler of cold water. The acid prevents the return of thirst, but all sweetish drinks only encourage it. Good Dublin stout possesses great power as a stimulus, when debility, through excessive heat, (to which many persons are subject,) is experienced. Cider, if ripe and good, is far superior to ginger beer. We must caution persons against the use of ice when hot, as this is a season when a determination of blood to the head is periodical with many people, and the application of sudden cold to the stomach may easily drive it there. Sleeping on the grass should be avoided, as fevers are often caught through the evaporation of moisture from the roots and stalks of grass. Of course, every one who can, will prefer the evening for a walk: even then some precaution is necessary, in case of being over-heated, not to throw aside the clothing, but rather prevent too rapid evaporation of the moisture from the body, by the addition of a handkerchief or shawl. This is a season in which chloride of lime, or vinegar, should be sprinkled over sinks, in presses, &c. All vegetable decaying matter, dirty water, or rubbish, should be cleared away from houses; and every part, from top to bottom, sweetened by whitewashing. The inside, not the outside, requires most attention. Bedrooms should be well ventilated, and vinegar sprinkled over the floors. The food should not consist so much in animal, vegetable, or fish diet, as in a mixture or change of all. Ventilation for houses, light diet for the inmates, bathing, acid drinks, even temperature and temperance, are all self-evident and strictly required.

DROPSY.

THERE are various kinds of this disease. Dropsy supervenes from fever. Cases have been known to arise from exposure to wet and cold. Dropsy also arises from debility in old age, and in young people as a result of excessive indulgence in liquors. It has been supposed that the cause of dropsy in the latter cases arises from diseased liver. There can be no doubt as to the liver being seriously affected in most, if not all cases; but the question is, whether it is the cause or a mere effect of the disease. The latest supposition is, that the lining membrane of the abdomen, the *peritoneum*, is altered in structure, that is to say, when the disease is confined to that membrane; but there is dropsy of the ovaries also.

When dropsy commences, the person affected feels inconvenience only when sitting,—no doubt from the pressure of the accumulated fluid. The fluctuation, like that of striking a bladder full of water, is felt when one hand is pressed against one side of the abdomen, and the other is tapped by a smart blow with the points of the fingers. One must not be content with one tap in one place, but with several in different places. The lower part of the abdomen is, of course, the best place to employ this test, as the fluid gravitates invariably downwards. The person afflicted, it is well known, passes very little urine; he may also breathe very well, provided there is no disease of the lungs or heart. In short, the many symptoms of dropsy may be the result of other affections; and none is so certain as the feeling of fluctuation after tapping with the fingers, which is a test of the presence of a fluid. The legs generally begin to swell after the disease has existed in the abdomen, although they may swell first, from the mere constitutional tendency, and even contain a great quantity of effused matter from a local cause; so that, nothing can be relied upon so much as through the sense of feeling.

The disease may, as we have stated, result from the inflammation set up by fever, or exposure to cold and wet. This species of dropsy can easily be subdued by bleeding, and purging with two drachms of supertartarate of potash and ten grains of jalap. When, however, the liver or spleen is diseased, or any of the abdominal viscera, the case is much more complicated and difficult. In general, we perceive no trace of inflammation, but simply a swelling of the abdomen; and that may be removed by purging briskly with jalap and cream of tartar. Some practitioners, amongst others Dr. Elliotson, consider elaterium as the best prescription in such cases. The dose should not exceed one quarter of a grain, as violent purging and vomiting may ensue, causing sinking, and requiring wine to support the system. The dose should be given at first only once in two days, the discharge of fluid by the intestinal canal being very great. This is the manner in which elaterium acts, by draining out the system. Mercury and iodine are also used where there is disease in any of the organs contained in the abdomen; and, finally, the patient often requires to have the water drawn off, more

particularly in dropsy of the membrane of the peritoneum, which laps over and covers the intestines, liver, spleen, &c. Before tapping, or drawing off the fluid, is resorted to, of course, the disease must be fully ascertained to exist, as sad mistakes have sometimes been made. The bladder may be enormously distended; and there have been cases where pregnancy has been mistaken for dropsy. Nothing, therefore, but the real test, by feeling the fluid through means of fluctuation, can warrant an operation of the above description. A vast number of remedies have been proposed, from furze-tops to elaterium; and yet the disease has hitherto defied, in many cases, the utmost exercise of art, because there is generally something at fault when nature cannot get rid of the fluid she creates, or when there is a diseased secretion and no outlet. Many remedies have been announced as infallible; but time has proved that they were comparatively worthless; although it must be admitted that the moment a good remedy is discovered, the chemists, who bawl for protection, adulterate it, or sell some useless substitute; and thereby the medicine ceases to be of any repute. Elaterium is one of those medicines which are greatly adulterated. Sir Astley Cooper, in treating the Duke of York, whose constitution was broken down through excess of every kind, used one grain of calomel and three of squills, made into a pill, one for a dose every second night: during the day, the following mixture was given:—Eight grains of carbonate of ammonia; one drachm of nitrous æther; twenty drops of tincture of foxglove, or digitalis; camphorated mixture of jalap, five ounces and a half. Three table-spoonfuls of this mixture three times a day.

Report speaks highly of this prescription; but we would trust a great deal in the pills, and in jalap or cream of tartar. A medical man must, of course, see all cases of dropsy, and decide what kind of dropsy it is in each case, whether in the ovaries or the peritoneal membrane, and also ascertain the cause, and take into calculation the patient's constitution, before any definite course of practice is pursued. The general reader will, we trust, be able to comprehend something of the nature and treatment of that dreadful complaint, which is what we principally aim at in the pages of the Family Doctor.

"PRITHEE, dòctor," said an old acquaintance to a celebrated quack, who was standing at his door, "how is it that *you*, whose origin I so well know, should have been able to obtain more patients than all the regular physicians?"—"Pray," said the quack, "how many persons passed whilst you put that question?"—"About twenty."—"And how many of those possessed a competent share of common sense?"—"Perhaps one of the twenty."—"That one applies to the regular physician, whilst I pick up the remaining nineteen."

DIET.

A CLASS of individuals have almost in all ages endeavoured to convince society that vegetable food is alone proper to man. Nature, in the formation of the teeth, in her provision (so abundant) of animal food for man, and in the natural propensity she has given him, sufficiently proves that vegetable diet was not intended to be his sole nourishment. She has, besides, made the food of animals easy of digestion in the stomach of man, and vegetables the most difficult. Look, again, at the difference in courage between a cow or a horse and a lion or a tiger. The roar of the elephant is feeble to that of the hungry lion. Take a vegetable-fed class, and a class fed upon a mixture of animal and vegetable food, and mark the difference in appearance, stature, and strength. Compare, again, the buffalo-eating savages of North America, with the Esquimaux, or even the Dutch peasants. Compare, likewise, our British beef-fed soldiers with the French rice-bolters. Nature speaks so plainly, that any government is aware of the high importance of feeding police and soldiers better than the mass of the workers.

Hippocrates was of opinion that all men were born with nearly the same mental capacity; but that the difference afterwards arose from the kind of food which they eat. Prior the poet says,

> "Was ever Tartar fierce or cruel
> Upon the strength of water gruel?
> But who shall stand his raging force,
> When first he rides, then eats his horse."

When nature gives us teeth, the formation of which adapts them to nip, to tear, and to grind, she shows her intention clearly enough to my mind. If we are told that she intended vegetable diet, although she gave us teeth to chew animal food, I may as well be told that she intended milk diet, and that the teeth are merely useless ornaments. It has been proved by observation and experiment that one kind of food is not calculated to nourish the body sufficiently, although people may exist upon it like a stunted tree or vegetable in inferior soil. A man would grow thinner, if fed on a beef-steak every day for twelve months. Change in diet and varied kinds of food, seem best adapted for men. Why should nature have given such variety, except to be consumed—such as fish, fowl, flesh, vegetables, fruits, &c.?

Compare the vigour of mind and health of body of the middle classes with the working classes, and the truth becomes self-evident, that mankind thrive best and can support greater fatigue, when fed on good and varied food. No evil consequence results, except when there is excess, when more is placed on the stomach than it can digest, and more blood is produced than the system requires. Too little food emaciates the body, stunts the mind, and enslaves man. Too much creates disease in the digestive organs, and produces apoplexy and gout; and the middle course, on the other hand, raises man to the highest physical and mental perfection.

We need not, therefore, attempt to compare man, with his teeth, to sheep; or a human being, with one stomach, to the ox with four. Again: we cannot compare man, with his lengthened intestines, to the wild animals living solely on animal food, with a short alimentary canal.

We shall conclude this introductory article on diet by a practical test, applied on the French railways.

Two gangs of workmen,—one French, and the other English,—were compared. The latter executed twice as much work in a given space of time. The food of the French was altered, and they neared the British one-fourth in the same space of time. Nothing, then, could be clearer than such a trial between beef and rice,—animal and vegetable diet.

Man is physically constructed to eat and digest both vegetable and animal diet, in all their varieties, and thrives best on variety,—allowance being always made, according to occupation, as to which should preponderate.

We shall next treat of the kinds of food, and times of eating.

THE CHANGES WHICH THE BLOOD UNDERGOES IN HEALTH AND DISEASE.

Health and life depend on the quantity, quality, and distribution of the blood. The chief source from which the blood itself is derived is the chyle: hence too much or too little food, or too great or too little activity of the organs that digest it, may render the quantity of blood preternaturally abundant or deficient.

The relative proportion of every constituent of the blood is capable of varying; and of course in the degree in which the healthy proportion is deranged, the quality of the mass must undergo a corresponding deterioration. The watery portion is sometimes so deficient, that the mass is obviously thickened; while at other times the fluid preponderates so much over the solid constituents, that the blood is thin and watery. The albumen, the quantity of which varies considerably even in health, in disease is sometimes twice as great, and at other times is less than half its natural proportion. In some cases the fibrin preponderates so much, that the coagulum formed by the blood is exceedingly coherent, firm, and dense; in other cases the quantity of fibrin is so small, that the coagulation is imperfect, forming only a soft, loose, and tender coagulum, and in extreme cases the blood remains wholly fluid. When the vital energy of the system is great, the red particles abound; when it is depressed, they are deficient. In the former state they are of a bright red colour; in the latter dusky purple or even black.

When the depression of the vital energy is extreme, the power of mutual repulsion exerted by the particles would seem to be so far destroyed, as to admit of their adhering to each other partially in certain organs; while in other cases they seem to be actually

disorganised, and to have their structures so broken up, that they escape from the current of the circulation as if dissolved in the serum, through the minute vessels intended only for the exhalation of the watery part of the blood. This fearful change is conceived to have an intimate connexion with a diminution of the saline constituents.

The quality of the blood may be also essentially changed by the disturbance of the balance of certain organic functions; digestion, absorption, circulation, respiration, are indispensable to the formation of the blood, and to the nourishment of the tissues. Absorption, nutrition, secretion, circulation, render the blood impure, either by directly communicating to it hurtful ingredients, or by allowing noxious matters to accumulate in it, or by destroying the relative proportions of its constituents. Organs are specially provided, the main function of which is to separate and remove from the blood those injurious substances. Organs of this class are called depurating, and the process they carry on is denominated that of depuration. The lungs, the liver, the kidneys, are depurating organs, and one result at least of the functions they perform is the purification or depuration of the blood. If the lungs fail to eliminate carbon, the liver bile, the kidneys urine, carbon, bile, urine, or at least the constituents of which these substances are composed, must accumulate in the blood, contaminate it, and render it incapable of duly nourishing and stimulating the organs.

But though the blood be good in quality and just in quantity, health and life must still depend upon its proper distribution.

GOBBLE AND GABBLE.

THE BLISTER REMEDY.

"It is of no use denying it, Gobble: you were not in a fit."

"The doctor thought I was."

"A fig for the doctor's thoughts! You know very well, Gobble, you were not in a fit."

"But I *knew* I was."

"There, now, I have caught you, Gobble. How *could* you *know* you were in a fit? Folks in a fit know nothing."

"But blisters on their feet will soon make them know *something!*"

"I am sure I did not ask the doctor to put them on your feet."

"Did anybody say so, my dear? You are committing yourself."

"No, I am not, Gobble; and if I had done so, it would only have been an act of charity to keep you at home, until you recovered your senses, Gobble. I tell you, you were *foxing* all the time."

"It would be queer foxing, my dear, to allow one's feet to be flayed."

"Oh! you may put it off as you like; but I know you were foxing, Gobble: and a pretty return you made your wife for all her kindness and attention when you did not know how to take

care of yourself. You need not laugh. It is no laughing matter, I can tell you. Just look at my poor feet: I cannot put a step on the ground, without thinking I am leaving some of the flesh behind. I might as well be walking on red-hot iron bars: but I am a martyr, Gobble,—a regular martyr to my domestic duties; and many a trial you put me to."

"What have I to do with the mistake? I suppose the blisters shifted on to your feet when we were both asleep. I have heard of blisters shifting about in that way. There are flies in them, you know,—Spanish flies; and English ones, my dear, crawl about, whatever Spanish ones may do. Besides, the heat of the bed might have wakened them up;—Spain is a warm country, my dear."

"This is worse than all, Gobble. You know you *foxed* being asleep, until I, simple fool, got into bed,—and tired enough I was, God knows,—and fell asleep; then you got up and shifted the blisters to my feet. But I will stand it no longer, Gobble."

"It is difficult, I know, to stand anyway, after the soles of one's feet are parboiled."

"You are a devil, Gobble, to sit and laugh at me in that way!"

"I am not laughing, my dear: I was in a fit, and the flies took a *fit* of quitting of their own accord, I am sure. A woman's foot is softer than a man's."

"Do you take me for a fool, Gobble? Do you think a blister is made of living bugs, to crawl about that way? No, no, Gobble. You took advantage of me, that you did, like a cruel monster, and put them on yourself; and when I awoke with the stinging, as if by a nettle-bed, you were quietly snoring, were you? I know better; you were enjoying your poor wife's agony, that you were; but you may have a hundred fits before I send for any doctor again, Gobble."

"And I hope the doctor will not bring any more blisters, if he does come, my dear; you know it is no joke; and bought wit is the best of all."

"You, Gobble, have bought and paid for more wit, in the way of drinking, than would serve a score of men; but it is money thrown away—nothing will cure you. As for my poor feet——"

"They will cure of themselves, my dear; and if I was in a fit, men are not then accountable for their actions."

"I tell you what it is, Gobble,—you are a sotting monster."

"And you, my dear, a sitting scold. However, we are quits: and if I am in error often, as I know I am, the best way of reclaiming a man is, not by punishing him when he stumbles in the mire of evil habits; kindness, my dear, is better than scolding—persuasion better than force."

"Well, Gobble, we shall see: it must have an end someway or other."

"Let it be tried, then, my dear."

"Be it so."

"Then kiss and be friends again."

INVALIDS' CORNER.

"Amusement is conducive to the restoration of health."

THE POISONER.

(Continued from page 78.)

You may imagine, captain, that after such a conversation I need never hope to become the husband of the fair Juana. However, chance decided otherwise. A noble, whom I saw frequently at my neighbour's, came one day to see me in my patron's shop, and after having complimented me a long time on my knowledge of pharmacy, he asked me if I could compose poisons. Surprised at such a question from a noble, I did not know well what to say. He instantly added, "I will give you two thousand five hundred scudi, if, in the course of a month, you will discover to me a poison that shall leave no trace behind it. You understand me, Paolo."

St. Croix started.

I was then called Paolo. The noble departed, leaving me thunderstruck. Yes, monsieur, I was horrified at the idea of such a bargain. However, I loved Juana, and I had not enough money to buy her, that is, to marry her. You see how society is now constituted. I was offered two thousand five hundred scudi to commit a crime; and I would not have received twenty crowns for my last discovery. On making new experiments on arsenic, orpiment, and antimony, I discovered a poison, violent in its action, it is true, but leaving no trace behind it. I sold it and secured my two thousand five hundred scudi.

Three weeks afterwards they celebrated, in the church of St. Paul, the funeral service of the father of the young nobleman; and my marriage with the fair Juana. I informed my father-in-law that I knew the secret of transforming metals; and the report ran, that I had found the philosophers' stone. My marriage, captain, was the source of new evils. A nobleman laid a bet of a hundred pieces of gold, at the end of a carousal, that he would seduce my Juana; as if our wives were not of as much value as theirs. When I appeared in the street, I was pointed at and termed a convenient husband. Oh! I suffered horribly. I could neither reply to them nor chastise their insolence: they were nobles. However, I revenged myself. Three days after the bet, I sent a letter to the noble, appointed a meeting, and signed it "Juana." He came. Yes, captain, he came joyous! with a smile upon his lips! ridiculing my title as a husband! He entered my house, sat down in an arm chair, as I am now, and drank a glass of wine whilst awaiting my wife. He expired before my face in the most horrible agony. I took his body on my back and threw it into the Tiber. But the vengeance of heaven was bending over me. My wife, whom I had sent on a visit to her father's, returned during my absence, poured out a glass of wine, and when I came back, I found her breathing her last.

There was a silence of several minutes,

Denounced by the police, I changed my name and took that

which I now bear. I left Rome, and wandered through the country, avoiding the officers of justice. A religious sister, who had known my mother, and whose memory I always retained, received me into her convent and restored me to the path of virtue. Unfortunately justice did not consider my conversion. I was about to be arrested one day, when a French traveller who knew of what crime I was accused, paid my ransom and carried me with him into France, on condition that I should preserve the secret of compounding poisons.

You see, captain, how difficult it is to remain an honest man in this state of society. Custom subdued the sentiments of honour: I obeyed; and fell into the snare of crime. All went on very well during three years; but suspicions having arisen against my rich protector and myself, he consigned me to the bastile, promising me his protection; and you see I am treated with the utmost respect. Such is the history of my life and my misfortunes.

St. Croix did not know what to say.

"You are called Paolo; but what was your mother's name?"

"My mother? Ah! you revive painful recollections: my mother, seduced by the cowardly Duke de Miremont and abandoned, was called ——"

"The Duke de Miremont," exclaimed St. Croix, suffocated with tears—'Ah! now I know your mother's name: she was called Fournarina, and you—you, Exili —— you Paolo—you are —— but they told me they were all dead."

Then handing to Exili the letter, he said, "Read!"

"The hand-writing of sister Marie."

"Sister Marie!' repeated St. Croix, astonished.

"Yes, the religious sister of mercy of whom I spoke."

And he kissed the paper tenderly.

"Why, captain!" exclaimed he, throwing himself into St. Croix's arms, "you are my brother!"

They were still embraced, when the registering clerk entered and handed each a letter, bearing the impression of the royal arms.

"We are free!" they both joyfully exclaimed.

"I set out for London this evening, accompanied by my noble patron," said Paolo.

"So soon! oh! brother, we will never meet again."

St. Croix opened another letter, which had been remitted to him along with his pardon, in which the marchioness informed him, that her father, although disgraced, intended to prosecute them for the crime of adultery. As soon as he had finished the letter, he seized the phial and the little book, took the arm of his brother, and departed, saying,

"It rests between us two now, Master Lieutenant General.'

END OF PART SECOND.

(To be continued.)

USEFUL RECEIPTS.

Corns.—Soak ivy leaves in vinegar during the space of fifteen days: then place a leaf, or part of one, over the corn; renew it every morning, and scrape off with pumice stone, dipped in vinegar each time, the portion of the hard skin which is detached. The vinegar acts by stimulating the absorbents, and the friction hastens their action. The pumice stone and vinegar would equally answer the purpose, if used every morning. We have often removed warts, on the same principle, by strong acetic acid applied in drops night and morning, or almond oil in the night, and the acid in the morning.

Boils.—The leaven of gingerbread, placed on the boil and left there until it bursts, has been found to be a good remedy. When the matter is removed, place some more leaven on the part. This has been found useful in wounds.

Inflamed Eyes.—*Lotion.*—Sulphate of zinc, ten grains; sugar of lead, ten grains; rose water, eight ounces. Wash the eyes three times a-day.

Scald Head.—Six drachms of the nitrate of silver ointment; two drachms Barbadoes tar: mix. Wash with common soft soap, and rub afterwards the parts well.

ANECDOTES.

Harlequin, in one of the French comedies, pretends to be sick. The physician who cures him demands payment. Harlequin refuses, and an action is brought. When before the judge, Harlequin pleads that *he does not want to keep the health he has got*, and is quite ready to return it, provided the physician will *restore the disease of which he deprived him.*

Rabelais, who was a Physician, when lying on his death-bed, received extreme unction from the priests. A friend came to see him afterwards, and asked how he did. "Going on my journey. They have already greased my boots."

Dr. Radcliffe observed, previous to his death, "When I was young, I had twenty remedies for every disease: but, now that I am grown old in the art of healing, I know more than twenty diseases for which I have not a single remedy."

ANSWERS TO CORRESPONDENTS.

Several correspondents express themselves satisfied with our labours and advice, and speak of eternal gratitude. If they are really disposed to serve us, the best way they can do so is for each to secure a new subscriber, and circulate the Family Doctor amongst their friends.

A. T. H.—The affection of the heart is sympathetic, and the disease chiefly mental. Change of scene would suit better than anything else. Go to the seaside for a month.

T. W., Macclesfield.—See receipt for pimples in No. IV., p. 53, of the Family Doctor. Take, occasionally, four grains of blue pill, and a seidlitz powder in the morning.

A. D. D., Nottingham.—Get one ounce of iodine ointment, and rub about the size of a pea upon the hard tumours, night and morning. Keep the bowels gently open, and poultice the tumours which burst.

Rodney.—Take a tablespoonful of Gregory's mixture (see No. III., p. 46,) three times a-day. Procure half an ounce of quassia, and pour a pint of boiling water over it. Take a wine-glassful at noon. Drink soda water or seidlitz powders.

John Hayden.—Two assafœtida pills, night and morning, thrice a week. Half a pint of infusion of rhubarb, two drachms of sweet spirits of nitre: a tablespoonful three times a-day. Take a little carbonate of soda, or magnesia, when the heat is felt most. Drink no more spirits. Blister the right side over the part where the fall acted.

J. C. H., Holborn.—The complaint is caused by handling sugar. Place the hands in warm water at night; rub the sores with common citron ointment; and sleep in leather gloves. Gloves should be worn also, with the fingers cut off, until the sores are healed.

Flora.—Changes of temperature should be avoided; goats' milk drank; and the bowels kept regular. The sea air is too heavy and keen for her delicate lungs. The south inland would be best. We are glad to see she is so heroic as to be sensible of the insidious nature of the complaint. We must give her a chapter in a future number.

Mary Jane.—Two of Anderson's pills at night, and one in the morning, three times a-week. The latter part of her letter states the cause clearly enough. Write again.

Amicus, Belfast.—See in No. V., article, "Deafness." A little olive oil and a syringe will effect a cure, if there is no ulceration, which we doubt. The smell and colour will show that.

J. H. L. H. R.—If you can, give up the *leaning system*; it will be well. Stand up at a high desk, if writing, and wash the mouth with a little vinegar and honey, mixed in a cupful of water, in proportions to make it agreeably sour, every morning. Take thrice a-week, for a fortnight, at night, one pill made of three grains of extract of colocynth and two grains of blue pill. Be in the fresh air as much as possible. Are there any cases of consumption in the family?

J. P. W.—Does not say where the specks are, whether over the white part of the eye or on the pupil.

D. J. Bray.—Is flute playing injurious to health? Certainly not, unless indulged in after meals, or too often. The blowing into a flute is merely breathing. With weak lungs, it would not be advisable. The glands under the neck are, with some irritable constitutions, excited by blowing on any instrument. Too much expiration of air, and too little inspiration, or when the latter is only practised by sudden gulps, is calculated to prevent the blood being sufficiently purified by the oxygen of the atmosphere, giving rise to headache, &c. Secondly,—Are braces injurious? Certainly, when they restrain the chest and confine the free action of the lungs. Braces should be of india-rubber, expanding easily; and the buckle should be very low down. We would be much better without them altogether. Nature does not like binding down in any manner; and man seems the only animal that adopts it.

Pixey.—It is nervous headache, and generally attacks females. It is difficult of cure. Bathe the feet in warm water frequently; and, at proper periods, try a shower of water over the head. The diet should be light, and a little wine or good porter is useful. Leeches to the temples, or a blister behind the ears, should be used when of long continuance. The bowels should be very regular; and two or three grains of calomel taken occasionally to keep the liver in order. The chief thing to attend to is to strengthen the system generally. Infusion of Jesuits' bark, when the bowels are regular, will be very advantageous: a tablespoonful three times a-day.

C. D., Stockport.—The case is very distressing; and no doubt the palpitation of the heart and general debility spring from the brutal treatment alluded to. Let her take a teaspoonful of electuary of senna thrice a-day, and, when necessary, a tablespoonful of castor oil. You must treat the mind yourself, by gentleness and kindness.

Subscriber, Hull.—Pay great attention to diet, and be particularly regular and temperate. Wine or porter in small quantities. Take exercise, and use the same pills as *J. H. L. H. R.* Go to the seaside in a month, and begin by sponging the body with salt water: then have a bucket of it over the head; and then go in for a plunge and out. Change of scene and amusement must be resorted to.

A Constant Reader, Thornbury,—Knowing the cause, ought to remove it at once. In such cases, general constitutional treatment is the best,—the object being to strengthen and brace up the system. Good port wine,—underdone animal food,—in short, everything which will strengthen and not excite too much. Bathing, shower baths, the sea-side, and occasionally one or two of Anderson's pills, night and morning (excepting the use of them at stated times, which *Constant Reader* will understand). A great deal depends on the patient, if, in fact, all does not. These are the general outlines of our advice, in the meantime. We shall hear how *Constant Reader* improves.

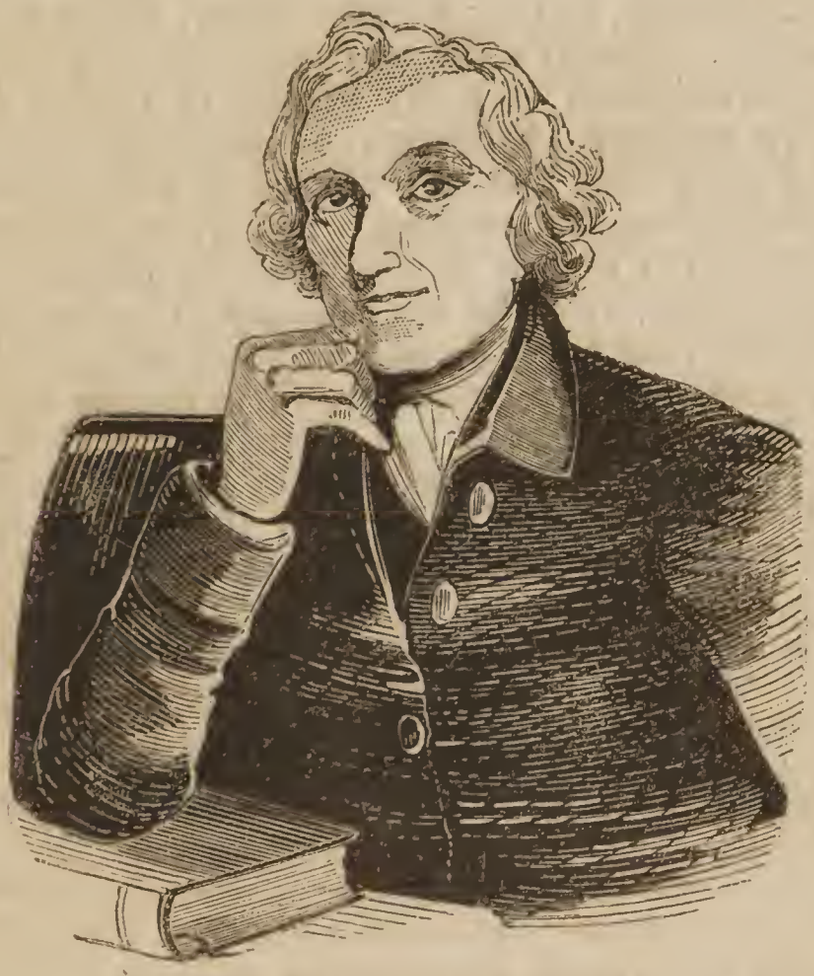
F. E. F., Glasgow; *Gregory*, Belfast; *T. P., L. C.*, and *A. O. F.*, all complain of the same symptoms, all of which arise from the same cause;—that is as plain as a sign-post, and must be instantly and irrevocably removed. Shower-baths, sponging the body with water in which a teaspoonful of muriatic acid has been mixed; early rising; moderate exercise; generous diet; study of instructive and agreeable books; carbonate of iron, twenty grains as a dose, infusion of quassia; regularity of living; marriage; and settlement to the business of life, are amongst the list of things which should be done for them. But we repeat, that those who are their own enemies, best know how to become their own friends; and we venture to assert that, if such constitutional and mental treatment will not cure them, nothing else can.

J. C., and *J. W.*, Birmingham.—We should willingly answer their questions; but they know that our journal is strictly a *family* one, and therefore we will not, as announced in our prospectus, introduce anything to its pages which is in the least degree calculated to create a blush in the family circle.

THE

FAMILY DOCTOR.

No. VII.] JULY 19, 1845. [PRICE 2*d*.



JOHN HUNTER

WAS born in 1728, at Long Calderwood, in Kilbride, a village near Glasgow, where his father possessed a small farm. Being the youngest of ten children, and his father dying when he was very young, his education was almost entirely neglected. When seventeen years old, he went to his brother-in-law, a cabinet-maker at Glasgow; and worked at his trade for nearly three years. At the end of that time, hearing of the great success which his brother William had met with in London, as an anatomical and surgical lecturer, he offered him his services as assistant in the dissecting-rooms, was accepted, and in 1748 commenced his anatomical studies. In 1749 he became the pupil of Cheselden, then surgeon to Chelsea Hospital, and in 1751 he went to St. Bartholomew's Hospital, and attended Mr. Pott. In 1754 he entered as a surgeon's pupil at St. George's Hospital. In the same year his brother made him partner in the medical school, and he delivered a part

of each annual course of lectures till 1759, when his constant and severe labours in anatomy, to which he had lately added comparative anatomy and physiology, began to affect his health so seriously that it became advisable for him to resort to some milder climate. He obtained an appointment as staff-surgeon, and in 1761 proceeded to Belleisle with the armament ordered to lay siege to that town. He remained in active duty till the end of 1763, when he returned to London, and commenced practice.

In 1767 he was elected a Fellow of the Royal Society, and in 1768 surgeon to St. George's Hospital. Among his pupils were Jenner, with whom he remained throughout his life on terms of the closest intimacy, and Sir Everard Home, whose sister he afterwards married. Hunter's life was occupied with a constant and laborious investigation of every branch of natural history and comparative anatomy, physiology, and pathology, to all of which he devoted every hour that he could snatch from the requirements of an increasing surgical practice. In 1773 he suffered from the first attack of the disease of the heart, of which he ultimately died. In October, 1793, he was engaged in warm disputes with his colleagues at the hospital; and a remark being made by one of them at a meeting of the governors, which Hunter regarded as an insult, he left the room, and had scarcely entered the adjoining apartment, when he fell dead in the arms of Dr. Robertson.

His museum consisted of upwards of 10,000 preparations, illustrative of human and comparative anatomy, physiology and pathology, and natural history. It was sold to pay the debts he had incurred in its formation, and to afford the means of support to his family. The government gave £15,000 for it, and presented it to the College of Surgeons, by whom it has at a very heavy expense been greatly augmented and maintained.

THE MOTHER'S GUIDE.

From the birth of a child, its physical treatment commences. The faculties make their appearance in exact proportion with the perfection of those organs which are adapted to their development. Even at the breast it is not unimportant that a good direction should be given to those inclinations which begin to manifest themselves, whilst the utmost care is devoted to health. Very few infants combine in themselves the limited conditions I am about to enumerate: they compose the class of civilised beings; and true civilization ought to teach in the first place what is due to the laws of nature, instilling those into them every day, and bringing nearer and nearer to them in practice; for beyond the laws of nature no happiness exists. If the question was put, which is the first teacher, common sense answers, the mother, in whose heart the Creator has implanted the proper intelligence to direct children. When a child is born, the first care of a mother is to

make it manly in sentiment, if custom placed no obstacles in the the way. But man imagines he is born with mind enough to direct himself; and we therefore presume that the time approaches when a woman's breast will be considered only a secondary means of nourishing the human race. Bottles with calves' nipples, &c., have been invented, as if God never attached a sacred duty to the creation of nipples. There is not a mother living whose conscience does not every day appeal to her to nourish her children. In that an unknown pleasure, joy, and satisfaction, are experienced. Yet we see, every day, mothers, under the slightest pretexts, abandoning an infant to another, through the force of example. And by whom are these infants reared? by a mercenary who makes merchandize of those attentions and cares which a mother only in reality knows how to bestow on her offspring. Many children, on the other hand, are reared by mechanical means,—by bottle and artificial nipples, from which they imbibe death. Out of a thousand children attempted to be reared in this manner, *seven hundred die;* whilst out of a thousand children reared at the breast, only *three hundred die* under two years of age. Let tender and affectionate mothers, who would sometimes sacrifice their fortunes for the life of an heir, only study that fact. It is undoubtedly murder to rear a child by the hand of a stranger, or by artificial means; because the most dangerous period of life is between birth and two years of age. During this interval, and up to five years, the various organs are developed; and they will continue throughout life, as they are then formed, robust and vigorous, or feeble and consumptive. Listen, then, to the counsels of nature, to which your own hearts will respond. In the eighth month of pregnancy, there are sufficient signs to convince a mother that she can suckle her child. If the fluid which exudes from the nipple is yellowish, the milk will be rich and abundant, and proper to open the bowels of the child, from its natural medicinal qualities. When the child is born, beware of officious neighbours and visitors, who exclaim, "How like the child is to its father!" and who generally insist upon bandaging it up tightly like a mummy. Nature had it, before the birth, swimming in a fluid, free and moveable. Why, then, constrain its limbs and the free action of all its members, the moment it sees the light? Cover it with soft, warm, and loose clothes; and, above all, leave its arms and legs free motion. Nor should the stomach and lungs be constrained; for all such constraint only prevents the perfect development of nature, which progresses in such a gradual manner, that we lose all estimate of it. If anything more than another should be avoided, it is physic. Nature has provided for that, in the yellowish fluid we have mentioned: that is her purge; and it beats all that man can invent. A few hours after birth, the breast will supply that which nature requires, her own purgative. During the first months, the child requires a *drink* every two or three hours; and during the night, three or four times. Never allow it to sleep at the breast; but only as long as it pulls heartily. Never waken it to take the

breast, even if it has slept longer than usual. About the eighth month, you can give it some spoon meat of the best flour bread with some milk and sugar, night and morning. At the tenth month, the child should be weaned; and even at the ninth, if the health of the mother suffers.

In regard to teething, instead of hard substances, a crust of bread is the best thing to give the child, which it will suck and break down at its leisure.

At eleven and twelve months of age, a little bread and weak soup will be very proper, and a slice of half raw animal food to suck, will habituate it to eat. Of all things that are likely to injure the tender stomach of an infant, shun that most awful practice of allowing it to taste any spirituous liquors, ales, &c. We have seen mothers guilty of that, through pure thoughtlessness: but it is an atrocious system; and they well deserve the future evils that befal their offspring, and the long train of miseries that are produced, who are guilty of it.

Of course, the open air is particular on fine days for children, when they are old enough to be carried in arms; and after eighteen months, it is far better to let them play than sleep; but put them to bed early. At this age, the child should be bathed in cold water, as it is well adapted to make it robust and of a vigorous constitution. The writer of this has reared two strong healthy children without a grain of physic, and has had them bathed always after ten months in cold water; of course gradually accustoming children to it by diminishing the quantity of warm water every day. It is now a luxury to them, which they ask for; and the great difficulty is not to get them in, but to drag them out of the water, in which they would dabble all day, like young ducks.

Finally, we may remark that in regard to clothing, it should be always sufficient for the season, but invariably loose and easy.

The mother should never, if she can avoid it, commit her children to the care of a hired nurse. If that nurse has for hire forsaken her own children, she must be a bad mother, and not a fit person to take care of your children.

As for school, children had far better be taught their letters at home as an amusement. Allow them to establish the physical powers before the mental; and the organs of the human body are never fairly formed until five years of age. Even the young crow is fully fledged, large, and active, before its mother drives it to care-creating living. It flutters its strong wings and is fed. So are colts, deer, dogs, and cats protected. And why should we entail thought and mental labour on a child of two years; when, God knows, it will soon enough have to begin a long lingering career of care, trouble, trials, danger, and difficulties?

'That's a very bad cold you have got, sir,' said a testy old fellow the other evening at the Opera, to a person who annoyed him by a perfect battery of coughing. 'I am sorry for it,' replied he: 'For it is, I assure you, the *best* I have got.'

OVER-WORK OF FACTORY CHILDREN.

Look at nature in her saving operations with children; no sooner does she give strength to the child to walk and run, than she instantly excites the desire for amusement; and by the game, and the noisy chase for sport, she produces that exercise which she finds necessary for the growth and the health of the little being. How eagerly does nature procure exercise from a game, and how naturally the child has a bias and inclination for it. Every species of game is invented, and every necessary muscle is worked often and freely in its place, to give strength and symmetry to the future man, and beauty, health, and elegance to the future woman. Look to the matenal care with which nature stirs up the love of play and of games in her young charges; and even when the sport is carried to excess, see how she turns that even to account, in the deep and healthy slumber of the child, in the long, and tranquil, and dreamless repose of the boy, and in the smiling, peaceful slumber of the little girl. But all this is amusement in which the body alone is concerned; or, if the mind comes into play, it is only to chase amusement like a gilt butterfly on the breeze. Why is this done? That nature may invigorate the body, give strength and muscle to the frame before she expands the treasure she has hid within, and which she decoys away into the chase of amusement, until the framework of the precious mind becomes securely established in health. How different is this from the little piecer's fate. His task is no amusement—it is toil; his pursuit is no game—it is torture. And when the over-exhausted body seeks repose at night, it is not to rest the weary muscle and the over-run body. It is to soothe the irritation of a fretful mind excited by continuous labour and watchfulness throughout twelve hours of clear torture. It is to reduce the mental excitement and to quiet the nervous agitation so fatally aroused, which makes the little piecer throw himself down, even on the factory floor, to slumber, starting at every second, and trembling with apprehension at every sound.

To prove to you still more clearly how philosophically correct I am in imputing all the evils to a prematurely over-worked intelligence, I will prove to you that these little piecers undergo a bodily exertion during their twelve hour's labour, which nothing but a constantly awakened mind could enable them to endure. It has been clearly proved, beyond the possibility of dispute, that these little children, in following the spinning frame, as it advances and recedes, actually walk from twenty-five to thirty miles each day; and this difference is caused only by the varying speed at which machinery is driven.

Let us consider for a moment the effects most likely to be produced upon society by the bondage of little children. These little sprouts of the social stock are subjected to labour before the flesh of the body has become muscle, and before the cartilage has become bone. Is it to be wondered at, then, that the bone, when

it does appear, assumes the bent form of the pliable cartilage, which the overworked muscle of the little slave has dragged out of the lines of nature's just moulding?

Those who have had the chance of studying anatomy will bear testimony to the soft and easily bent nature of the infant's bone. Those who look at the smooth and rounded limbs of boyhood will easily conceive that there is no muscle formed there as yet. Look, on the other hand, to the arm of the blacksmith, ridged and lined over with great muscle. Why? because he has a bone in his arm and there is something for the muscle to pull against. If you were to cut a little sapling and tie a string to it and pull, would not the twig bend under the influence? so it is with the limbs of a child; set its little muscle to constant work when the bone is not formed, and the pulling of the muscle at length makes the limb bent. But, if you were to take a grown branch, and tie a cord to it and pull, the branch resists, and you have something to work against; so it is with the arm of the blacksmith: the muscle pulls against—what? not cartilage, but strong bone; the bone resists, and the matured arm can wield the massive hammer. It is the constant standing, the walking, and the laborious manipulation of the hands, which make the little piecer's feeble bone yield to the force and become crooked and weak. It is this punishment, which was formerly inflicted upon the witches, which the infant has to bear, that renders his body so diseased and so disfigured: but, there is another agent, the mind, which becomes exhausted, but not so soon as the body. I have shown you that nature first intends to mature the body before she will allow the mind to appear at all. Man, in his refinement of tyranny, brings the mind and the body of the infant into premature action, and makes idiotcy of the one, and distortion and crippling of the other. The mind of the child employed at its ceaseless threads goes on beyond the body, and at length exhausts both. Every person exercising the mind knows the fatigue endured by the body at the same time. But when the mind is constantly sprung, and the body constantly stretched, then no mortal power can endure the torture: the body must yield to disease, and the mind to idiotcy or imbecility. The body can procure no rest; and therefore, we have it crooked and diseased. The mind, like the bow we hang upon the wall, is hung up stretched and bent to the utmost, and after a time it can become neither unstretched nor unbent. The wise hunter unstrings the bow; so would the wise man relax the mind in its working. With the piecer the operation is constsnt: therefore, we have it sunk under the load, like an over-burdened arch, or live capable of performing only one task, that of the mechanical slave. It is on this account, then, I will have to show to you the prevalence of nervous complaints or convulsions amongst the factory children; and by-and-bye prove to you the mortality amongst children from excessive endurance and overwork.

THE SMOKER.

"Well, sir, what do you complain of?"

"I have a bad digestion, sir; sourness of the stomach; and a nasty taste in my mouth in the morning. I tremble greatly at times; my dreams are disturbed; and my appetite is generally indifferent. Besides, I don't feel the taste of my food as I once did. My mind is not so clear; nor do I, generally speaking, enjoy life. I am bilious, too; and have fits of sickness and vomiting, which smoking sometimes removes."

"Oh, you are a smoker?"

"Yes, sir; I indulge in it."

"To what extent?—How many ounces do you smoke in a day?"

"Perhaps two."

"Do you drink much?"

"I take a glass at times; but not to say immoderately."

"When do you smoke? First thing in the morning, and last thing at night, I presume?"

"Generally; and as often as I have time. I always smoke after meals, and sometimes before."

"Now, in the name of common sense, can you expect to enjoy life, digest your food, work your brain, or even feel your way through life? You must be always in a dreamy state,—half sensible, half muddled, like an opium eater, who imagines he lives, and who dozes away existence, in both senses of the word. You begin in the morning. Well,—the stomach is then most susceptible of any impression; and you ought to know that in the morning nature looks for nourishment of a good and wholesome kind. How can you follow her rules if you kill the appetite? And you must know that smoking tobacco cheats the system, by driving away hunger. It deadens the nervous faculties; consequently throws the stomach into a dormant state; and when food is thrown upon it, it is too lazy, if we may say so, to digest; just as, if you got a knock on the head to stun you, and then began to study. The liver, of course, partakes of the same evil: bile accumulates, which is not used; and the system becomes clogged up, dead, dull, and suffering: the skin yellow; the face pale; and the countenance anxious. You then spit away the saliva, which is useful and necessary for digestion."

"But I would do that, sir, if I did not smoke."

"Because you have begun by using a stimulus: you have created a want, which nature supplies. In fact, persons who spit much should not use tobacco; as, in certain cases, that very weed might save their lives, especially when the system seems so easily stimulated by it. I dare say, if the truth was known, you smoke to deaden the stomach; then smoke again to upset the digestion. You smoke to cause you to sleep; and you smoke to drive it away. The system will soon become soaked with it; and the functions of the body be disturbed."

"They are, indeed, deadened, sir: no doubt about that."

"And for what end? for what enjoyment?—Are you aware that peat moss, crome yellow, mangel wurzel, and lettuce leaves, are mixed up like the weed; and that tobacco is now sold cheaper per pound than the duty imposed upon it? Are you aware, also, that, if your eyes were bandaged, you could not tell when your pipe was lighted, or when it was not?"

"I never noticed that, sir; but I have, in the dark, when the pipe was low, wondered and felt whether it was out or not."

"Try it. Did you ever see a blind man smoking? If you did, it is a rarity.—In short, you make a chimney of your mouth, and must expect to find the throat filled with sooty phlegm every morning, the liver out of order, the stomach upset, the head confused, the faculties dull, the appetite impaired, and the sleep restless. Abandon it. Tobacco is a very useful medicine; it acts against contagion; it is employed as a stimulant; but its chief use is as a sedative, or an agent that paralyses the nervous and therefore the muscular systems.—It stimulates first; then soothes, depresses, and finally takes away sensation altogether, producing a paralysis of the whole frame, when a sword's point would not make a man start. Calculate health, time wasted, money spent, life contracted, and all its keenest enjoyments deadened; and you will give up such a slow-working insidious weed, that makes you disgusting to others, and disagreeable to yourself.

DIET.

There may be said to be two general heads under which the food may be arranged,—viz., vegetable and animal nutriment. As we were on the former subject last week, we shall continue it.

Vegetable diet may be subdivided thus:—1st, summer fruits; 2nd, leaves, stalks, and shoots of plants; 3rd, esculent or nutritious roots; 4th, seeds of plants. The summer fruits are, stone fruits, such as cherries, plums, &c.; then apples, pears, strawberries; and lastly, grapes, dates, &c. There are four composite parts in all fruits,—sugar, acid, mucilage, and jelly. The latter becomes part of man's diet when preserved in sugar, which keeps it from spoiling. The mucilage is very pleasant to the taste, and contributes to the relish of fruits. Jelly, boiled for a length of time, would be converted into mucilage; and if dried, becomes hard; showing that jelly is a mere vegetable gum, combined with acid. Now, it is important to observe, that the nutritive part of fruits bears an exact proportion to the quantity of juice in them. The less juice, the less nourishment. In fact, what is left behind is rubbish on the stomach. Hence, sucking fruits, instead of eating them, is best. Apples cooked are more healthy than when raw, because the heat causes sugar to be evolved, and renders them less windy. Stone fruits, on the other hand, contain more

acid than sugar, and are less nutritious for man. Peaches are very dangerous to invalids; as they seldom ripen in this country; and the acid they contain is deleterious in its operation. Pears are supposed to be inferior to apples; yet they contain more juice; consequently more sugar; and ought to be, notwithstanding prejudice, a much more nutritive food. Grapes grown in this country are inferior to those of the southern parts of the continent, although excellent, in health or disease, when ripe and full-flavoured. In some parts, a bunch of grapes is considered sufficient for a meal. They are decidedly the sweetest and safest of all fruits for invalids. They act frequently as a gentle purge; and perhaps it is not generally known, that, from the sediment of wine-casks, cream of tartar is produced. In eating fruits, such as strawberries, the use of cream has been considered objectionable, because it curdles on the stomach. This is a plea of ignorance; as we formerly showed by reference to the power of the gastric juice, which of itself naturally curdles raw eggs, milk, &c. Cream may be used with the greatest safety: the only misfortune is, that there is not enough of it for everybody. The cranberries, with delicate persons, should be very cautiously used; and if taken, should be, as the Irish say, smothered in cream, and buried in sugar. The sweet orange is most excellent in febrile complaints, and when heat of the constitution is complained of. All fruits should be eaten after the principal meal; yet no particular time can be stated, as they may be safely used at any time.

Cauliflower should be well boiled, especially for sick persons, and no attention should be paid to the cook's pride, viz., that of having it in shape.

The good quality of esculent roots depends most on the gum they contain. The Moors, when gathering the gum from the acacia tree, subsist entirely upon it for several weeks.

Garlic, onions, and leeks, are more used on the continent than in this country, and are excellent condiments. So is the beetroot, which contains so much sugar that forty-five French acres will grow seven hundred thousand pounds, at threepence per pound. Mushrooms may be called the last of these kinds of alimentaries, and must be used with great caution.

(*To be continued.*)

RULES FOR PRESERVING THE TEETH AND GUMS.

The teeth are bones thinly covered over with a fine enamel, and this enamel is more or less substantial in different persons. Whenever the enamel is worn through, by too coarse a powder, or too frequent cleaning of the teeth, or eaten through by a scorbutic humour in the gums, the tooth cannot long remain sound, any more than a filbert kernel can when it has been penetrated by a worm.

The teeth, therefore, are to be cleaned, but with great precaution;

for if you wear the enamel off faster, by cleaning the outside, than nature supplies it within, your teeth will suffer more by this method, than perhaps by a total neglect. A butcher's skewer, or the wood with which they are made, must be bruised and bit at the end, till, with a little use, it will become the softest and best brush for this purpose; and in general, you must clean your teeth with this brush alone, without any powder whatever; and once in a fortnight, not oftener, dip your skewer-brush into a few grains of gunpowder, breaking them first with the brush; and this will remove every spot and blemish, and give your teeth an inconceivable whiteness. It is almost needless to say, that the mouth must be well washed after this operation; for, besides the necessity of so doing, the saltpetre, &c., used in the composition of gunpowder, would, if it remained, be injurious to the gums, &c., but has not, nor can have, any bad effect in so short a time.

It is necessary to observe, that very near the gums of people whose teeth are otherwise good, there is apt to grow a false kind of enamel, both within and without: and this enamel, if neglected, pushes the gum higher and higher, till it leaves the fangs of the teeth quite bare above the enamel, so that sound teeth are destroyed, because the gum has forsaken that part which is not sheathed and protected, in consequence of such neglect. This false enamel must, therefore, be scaled off; for the gum will no more grow over the least particle of this false enamel, than the flesh will heal over the point of a thorn.

An Opiate for Decay of the Teeth.—Take of Armenian bole the quantity of a large nutmeg, a like quantity of rock-alum, twopenny-worth of cochineal bruised, and a small handful of the chips of lignum vitæ; simmer them with four ounces of honey, in a new pipkin, for a little time, till the ingredients are mixed, well-stirring the mixture till taken off. To be used thus:—Take a large skewer, and bind on the end of it a piece of linen rag; dip the rag in the medicine, and rub the teeth and gums with it. The longer you refrain from spitting, after the use of the remedy, the better. The writer has refrained from doing it for an hour. Wash the mouth well at least once.

Cure for Drunkenness.—Baron Bruhl Cramer, a celebrated German, has found out a method of making the most confirmed tippler have the greatest loathing and repugnance to all sorts of spirits and strong liquor. Take one teaspoonful of the tincture of columba, one teaspoonful of the tincture of cascarils, one teaspoonful of the compound tincture of gentian, a wine-glassful of the infusion of quassia, and twenty drops of elixir of vitriol; mix, and take twice or thrice a day, and have a jug of cold water dashed over the head every morning coming out of bed, and the feet bathed in warm water every night. Continue this for six or eight weeks. Dr. Roth, of Swinnemunde, has succeeded with this remedy in curing many poor creatures, both men and women, who were killing themselves by continual tippling and drunkenness.

HOW TO PROCEED IN CASES OF EXPLOSIONS IN MINES.

The after-damp, or carbonic acid, it is well known, deprives animals of life. When an explosion takes place in a mine, the men and boys who survive the fire know well that the oxygen of the air has been all used, and that the gloomy shadow of death is, by stealth and in darkness, stealing upon them. The wave of deadly gas rushes along the galleries of the mine, and destroys all life within. It is generally imagined that death has put his sable hand on his prey, and that the spirit has fled for ever. But it is not so.—Life is suspended, as in drowning, through want of proper air to breathe, and by inspiration of the gas, against which miners in vain, by instinct, seek to protect themselves by stuffing something into their mouths. After an explosion, it is practicable in most cases to procure the bodies; and much heroism is thrown away in that, as no medical attendant thinks it possible, or at all necessary, to attempt to restore life.

It seems to me strange that such should be the case. It is not so, if a man becomes insensible in a well. It is not so, when he is supposed to be drowned in water.—Why, then, should it be so, when he is rendered insensible by carbonic acid gas? Does that act like a bullet or a dagger? Does it do more upon the lungs or stomach than water does?—What does it do, but suspend animation?—nothing more.—Life is still burning, although the flame has got to the very socket, and is almost extinct. Why not recal it? How do so? All mines should be provided with helmets, such as those retained by manufacturers, merchants, &c., in expectation of fire. One of these on a man's head would enable him to penetrate pure carbonic acid gas, and bring out instantly the bodies of the miners. Such is the case without helmets being used.—The moment the miner's body is brought to the *bank*, or surface, he should be conveyed into the nearest house and placed on a gently declining bed or board, the head being raised. No crowd should be present. The body should be stripped naked, and a stream of cold water permitted to run down the spine; whilst the feet, sides, stomach, &c., should be rubbed with ammonia.—Tobacco smoke may be injected, as in drowning; and when the least signs of animation appear, the nostrils should be tickled, and smelling salts applied. It is important that vinegar and water should be swallowed the moment there is power to do so. The great remedy, however, is the cold stream of water; and knowing that this of itself will recover persons apparently killed by poisons, such as prussic acid, we are prepared to stake our name and character—everything, in fact—on the chances of recovering a miner who is suffocated by after-damp and *speedily brought into the open air*. IT CAN BE DONE, AND OUGHT AT LEAST TO BE TRIED.

ABERNETHY ON DELIRIUM.

Delirium often takes place in consequence of accidents of no very momentous kind. It may occur without fever, or may be accompanied with that irritative sympathetic, which is often the last stage of all that closes the sad history of a compound fracture. Delirium seems to be a very curious affection. In this state a man is quite unconscious of his disease. He will give rational answers to any questions you put to him, when you rouse him; but he relapses into a state of wandering, and his actions correspond with his dreaming. I remember a man in this hospital (Bartholomew's), whose leg was in a horrible state of sloughing (the separation of the mortified parts). I have roused him and said, "Thomas, what is the matter with you? How do you do?" He would reply, "Pretty hearty, thank you, nothing the matter with me. How do you do?" He would then go on dreaming of one thing and another. I have listened at his bedside, and I am sure his dreams were often of a pleasant kind. He met his old acquaintances in his dream, people whom he remembered *lang syne*, his companions, kindred, and relations, expressing his delight to see them. He would exclaim every now and then, "That's a good one. Well, I never heard a better joke;" and so on. It is curious, that all consciousness of suffering is thus cut off; and it must be regarded as a very benevolent effect of nature's operations, that extremity of suffering should thus bring with it its antidote.

RHEUMATISM

Is either acute or chronic. By the acute is meant that species of rheumatic fever beginning with shivering, heat, thirst, quick small pulse, and pain all over the body, but settling in the joints, producing such pain and debility that the patient lies almost immoveable like a log. It may be caught by sleeping in a damp bed, and is often induced by excessive drinking, and by exposure, when long continued, to a variable temperature. Soldiers encamped are very liable to it; and every one who has had the misfortune to sleep in a damp room or go long with wet clothes on, is acquainted with this complaint, in all its forms, from the acute, which we have described, to the chronic state, in which the pain is generally confined to some particular part of the body, as the loins, shoulders, back, &c.

Every one knows this complaint so well, that a description of its symptoms is not necessary.

Treatment.—Rheumatism in its acute state was at one time, and is now, treated by bleeding; but we are no advocate for such a course, the disease almost invariably settling down, when of long standing, on the heart, producing disease of that organ. Bleeding we have known to prove fatal in several cases, and no doubt from the sympathetic affection of the heart. We have found calomel, three grains; opium, a quarter of a grain; made into a powder and given night and morning, sometimes every third hour, to be the most

effectual prescription. The action of the bowels was assisted by cream of tartar and salts. The patient drank barley water, whey, infusion of tamarinds; and the diet was exceedingly light, such as rice, sago, chicken broth, &c. But the attendants should particularly observe the state of the walls of the room where the patient is; also the bed clothes, draughts of air, &c., all of which retard recovery, and by suppressing the profuse perspiration of acute attacks, give rise to the original cause of the mischief.

There is one sure way of always deciding whether rheumatism is inflammatory or not, in cases less violent than the above. It is by ascertaining whether the pains are relieved by heat or cold. If by the first, the rheumatism is not inflammatory. If by the second, it is; and wet and cold remedies must be employed accordingly; the hot, where there is no inflammation; and the cold, where it is present. In inflammatory rheumatism, calomel, likewise colchicum, as commonly prepared for gout, have been successfully employed. In the non-inflammatory kind, warm baths, and the ammoniated tincture of guaiacum: dose for adults, from one to two drachms. Chronic rheumatism, however, is a most troublesome affection, and may be chased from joint to joint, all over the body. A real chronic affection takes possession of the body for life. The American Indians have pretended to cure it by friction under water when the ice is upon it, through which a hole must be broken, and the patient slipped in along with the operator. Our mode is to regulate the diet, avoiding everything of a stimulating kind in meat or drink. Calomel and opium, colchicum, &c., as we have before described, are all employed; and after they have acted on the system, bitters, tonics, &c., are found to complete the cure: but great care must be taken to avoid future exposure. Warm woollen clothes are of course absolutely necessary. There are frequently indolent swellings of the joints, which result from rheumatic affection. Iodine ointment has been found highly beneficial in removing these swellings, when rubbed in night and morning over the swelling.

The Americans have a recipe for chronic rheumatism: garlic, two cloves; gum ammoniac, one drachm: bruise together and make into several boluses with water. Take one at night and another in the morning. Drink with this recipe sassafras tea, having the teapot half filled with the chips.—It is greatly celebrated in America.

When William III. showed his legs to Doctor Radcliffe, and asked him what he thought of them, "I think," said the doctor, "that I would not have your majesty's two legs with your three kingdoms." He was instantly dismissed, which was no joke for the Doctor.

The Tailor.—One of the above trade turned soldier, and was severely wounded in the head. The surgeon to the regiment, on examining the wound, declared that he would recover, as the weapon had not touched the brain. "Egad," said snip, "if I had had any brains at all, I should have been any where but here."

ROYAL HUMANE SOCIETY'S DIRECTIONS IN CASES OF DROWNING.

1. As soon as the patient is taken out of the water, the wet clothes, if the person is not naked at the time of the accident, should be taken off with all possible expedition on the spot (unless some convenient house be very near), and a great coat or two, or some blankets, if convenient, should be wrapped round the body.

2. The patient is to be thus carefully conveyed, in the arms of three or four men, or on a bier, to the nearest public, or other house, where a good fire, if in the winter season, and a warm bed, can be made ready for its reception. As the body is conveying to this place, great attention is to be paid to the position of the head; it must be kept supported in a natural and easy position, and not suffered to hang down.

3. In cold or moist weather, the patient is to be laid on a mattress, or bed, before the fire, but not too near; or in a moderately heated room: in warm and sultry weather, on a bed only. The body is then to be wrapped as expeditiously as possible, with a blanket, and thoroughly dried with warm coarse cloths or flannels.

4. In summer, or sultry weather, too much air cannot be admitted. For this reason, it will be necessary to set open the windows and doors, as cool refreshing air is of the greatest importance in the process of resuscitation.

5. Not more than six persons are to be present to apply the proper means; a greater number will be useless, and may retard, or totally prevent the restoration of life, by rendering the air of the apartment unwholesome. It will be necessary, therefore, to request the absence of those who attend merely from motives of curiosity.

6. It will be proper for one of the assistants, with a pair of bellows of the common size, applying the pipe a little way up one nostril, to blow with some force, in order to introduce air into the lungs; at the same time, the other nostril and the mouth are to be closed by another assistant; whilst the third person gently presses the chest with his hands, after the lungs are observed to be inflated. By persevering in this process, the noxious and stagnant vapours will be expelled, and natural breathing imitated. If the pipe of the bellows be too large, the air may be blown in at the mouth, the nostrils at the same time being closed, so that it may not escape that way; but the lungs are more easily filled, and natural breathing is better imitated, by blowing up the nostril.

7. Let the body be gently rubbed with common salt, or flannels sprinkled with spirits, as rum, or geneva. A warming-pan heated (the body being surrounded with flannels), may be lightly moved up and down the back; fomentations of hot brandy are to be applied to the pit of the stomach, loins, &c., and often removed. Bottles, filled with hot water, heated tiles, covered with flannels or hot bricks, may be efficaciously applied to the soles of the feet, palms of the hands, and other parts of the body. The temples may be rubbed with spirits of hartshorn, and the nostrils now

and then tickled with a feather; and snuff, or eau de vie, should be occasionally applied.

8. Tobacco fumes should be thrown up the fundament: if a fumigator be not at hand, a common pipe may answer the purpose. The operation should be frequently performed, as it is of importance; for the good effects of this process have been experienced in a variety of instances of suspended animation. But should the application of tobacco-smoke in this way not be immediately convenient, or other impediments arise, clysters of the infusions of tobacco, or other acrid infusions, with salt, may be thrown up with advantage.

9. When these means have been employed a considerable time without success, and the use of any brewhouse or warm bath can be readily obtained, the body should be carefully conveyed to such a place, and remain in the bath, or surrounded with warm grains, for three or four hours. If a child has been drowned, its body should be wiped perfectly dry, and immediately placed in bed between two healthy persons: the salutary effects of the natural vital warmth, conveyed in this manner, have been proved in a variety of successful cases.

10. While the various methods of treatment are employed, the body is to be well shaken every ten minutes, in order to render the process of reanimation more certainly successful; and children, in particular, are to be much agitated, by taking hold of their legs and arms frequently, and for a continuance of time. In various instances agitation has forwarded the recovery of boys who have been drowned, and have continued for a considerable time apparently dead.

11. If there be any signs of returning life, such as sighing, gasping, or convulsive motions, a spoonful of any warm liquid may be given; and if the act of swallowing can be performed, a cordial of warm brandy or wine may be given in small quantities, and frequently repeated.

12. Electricity may be tried by the judicious and skilful, as its application neither prevents nor retards the various modes of recovery already recommended; but, on the other hand, will most probably tend to render the other means employed more certain, and more expeditiously efficacious. This stimulus bids fair to prove an important auxiliary in cases of apparent death; and therefore deserves the serious regard and attention of the faculty. The methods which have been described, are to be employed with vigour for three hours or upwards, although no favourable circumstances should arise; for it is a vulgar and dangerous error to suppose that persons are irrecoverable, because life does not soon make its appearance,—an opinion that has consigned to the grave an immense number of the seemingly dead, who might have been restored to life by resolution and perseverance. Bleeding is scarcely ever to be employed in such cases; since, far from giving a stimulus to the circulation, it has a tendency to weaken its force.

RECEIPTS.

OPODELDOC.—Castile soap, a quarter of a pound; brandy, two glasses; camphor, one ounce.—Boil together, and use when cold. This is an excellent embrocation for sprains or chronic rheumatism.

SCURVY.—Diluted sulphuric acid, one drachm and a half; syrup of roses, two ounces; distilled water, four ounces. Drink freely.

SCROFULA.—One scruple of powdered bark; six grains of powdered myrrh; three grains of compound cinnamon powder. Three times a day.

ANSWERS TO CORRESPONDENTS.

T. R. W., George-street.—Flowers of sulphur in milk. A table-spoonful every morning. Rub with citron ointment, and take a seidlitz powder twice a week.

G. H., Nottingham.—Ask a dentist. Certainly, stuff teeth, rather than pull them. Never read the work.

T. G.—Try Cayenne lozenges. It is sometimes natural. Tartaric acid is good, but practising singing is better. Time will cure you, and practice.

S. T., Holbeck.—Wear flannel, and study our article on rheumatism in this number.

J. T., Upton.—Take some colocynth pills, and procure infusion of Peruvian bark; a wine-glassful thrice a day. We shall be glad to see the hare, and happier to eat it in season.

P. M., Manchester, must keep his spirits up. There is not much appearance as yet of consumption. Change of air,—a country life would be best. Take four grains of blue pill and four grains of colocynth three times in one week. Then procure some infusion of gentian root, and drink half a wine-glassful every morning, eating a crust of bread first. Take as much gentle exercise in the open air as you can, and in a fortnight begin sponging the body every morning. Live regularly and moderately.

A Young Man must take private advice (fee 2s. 6d.), which will be continued until he is well.

T. F. M.—Wash the head with yolks of eggs, beat up in warm water; use pomatum, and rub with a hard brush.

J. P., Aberdeen.—Rub with a hard brush, every night and morning, for a quarter of an hour: dash water over the head, and rub with a hard towel. Time and that practice will set all right.

William Walker.—The subject will be treated shortly. To publish questions, when answers alone occupy so much space, would fill the Family Doctor altogether. Some of the statements made to us occupy two sheets of foolscap.

Henry Greene.—Private advice on the same terms as "*A Young Man.*"

T. G., Leicester.—Keep the bowels regular with common rhubarb pills. Take more exercise, and attend to the diet. If he smokes, give that up.

An Enquirer, Manchester.—See article "Scurvy," in No. 3 of Family Doctor.

D. Juan, Liverpool.—Wear flannel: live regularly: drink nothing for a time: rub the back with hartshorn and oil every morning, and keep the bowels open.

Maria M.—Take four grains of blue pill thrice a week, for a fortnight. Then get some infusion of quassia; half a wine-glassful every morning. Be careful as to diet. Get into the open air as often as convenient, and don't be alarmed.

J. P. C.—Open the bowels smartly with senna and salts; and, night and morning, apply with cloths a strong solution of common salt to the glands. Write us the result in a week.

T. H., Coventry.—See in last number "Dropsy," and try cream of tartar and jalap.

Wm. Smith.—Take of Peruvian bark infusion, three table-spoonfuls thrice a day. Write again. Look to the bowels.

G. V., Heywood.—Mucilage of acacia, half an ounce, dissolved in half a pint of hot water; sweeten with sugar: syrup of squills, half an ounce, and syrup of buckthorn, half an ounce: a tea-spoonful for a dose, thrice a day.

Mors.—Such a feeling is natural: neither age nor sex is stated. Use the shower-bath, and open the bowels freely with salts and cream of tartar.

J. R., Manchester.—One pill, from any druggist. The eyesight will improve under the cold water application.

A Poor Man, Barnsley.—Try an injection of olive oil.

Hemiplagia.—His conjecture is well founded. Try the electric shock, and don't despair.

THE

FAMILY DOCTOR.

No. VIII.] JULY 26, 1845. [PRICE 2*d.*

ARISTOTLE SCHOOL.

ARISTOTLE was the promulgator of doctrines which have exerted a wide and permanent influence over the mind of mankind. He was the preceptor of Alexander the Great; nor did the royal pupil forget, in the zenith of his power, that love for science which had been instilled into his youthful mind. He munificently supplied Aristotle with the means of pursuing his studies, furnishing him during his campaigns with rare and valuable objects of natural history. The great reputation of Aristotle depended on his comparative anatomy. The Greeks having a great prejudice against anatomical investigations of the human subject, rendered it necessary to derive his knowledge from dissections of inferior animals; and what he did know of the latter, was derived from Hippocrates. His habit was to deliver lectures to his disciples whilst walking amongst the trees of the Lyceum, and consequently, his disciples were called Peripatetics, or what we would term perambulators.

Aristotle's system was founded on the four supposed elements of air, earth, water, and fire, and on the difference between matter and form,—the former containing the possibility of existence, the latter whatever was derived from it. Change he considered a principle inherent in nature, and to this he applied the term *force*, or *faculty*. His disciples cultivated anatomy and physiology, as well as natural history. His nephew, Calisthenes, accompanied Alexander in his expeditions, and wrote two treatises. Theophrastus succeeded him in his school, and catalogued five hundred plants in botany.

Aristotle considered that the brain was composed of earth and was of no importance to the animal economy. He supposed the heart to be the origin of all the nerves, and jumbled nerve, tendon, and ligament together. Aristotle divided the human system into sections, and by his industry showed what one mind could effect. He collected the crude mass of facts which existed, and laid the foundation for a new science. His *forte* lay in varied information on all subjects. In stature he was diminutive, slender in frame, and feeble in constitution. Without noting the errors of a great inquirer into nature, it may be said, that as his pupil, Theophrastus, may be called the father of *botany*, so Aristotle was that of *zoology*, as Hippocrates was that of *physic*.

THE HUMAN RACE

Is divided by some into three races, by others into five, and by some into as many as fifteen. There are more than one thousand different languages or dialects, the most of which have no resemblance to each other whatever.

Savage State.—From what we can learn from history, and through tradition, man is at first in a savage state, and continues so during many ages; the North American Indians are still in that wild state, which some tribes of men seem to prefer to that of civilization. In some parts of South American coast, tribes live on shell fish, and under trees, and in caves, being very little different from the orang-outang.

Instinct.—Man, like all other animals, possesses instinct enough to preserve life, to search for pleasure, to avoid death and pain, to turn all surrounding objects to some use, to perpetuate the race, to assail where something is desired, and to defend his liberty and life. Instinctively every one studies his own interest, and assailant and assailed equally have the same interest in victory. Man has, however, another principle in his nature; it is his Reason. He soon learns to subdue wild animals, to procure their labour, milk, or flesh, the skin, or their fleece, and likewise to cultivate the earth to provide fruits and food. The race is, first, a hunting, pastoral, wandering race, then husbandmen, and sedentary in their habits. The forest is swept away, and waving fields

of corn raised in its place; the marsh is drained and becomes a meadow; the atmosphere is improved and the climate made more healthy by drainage; bridges are thrown over currents; boats are constructed and seas passed over; pits are dug to deprive the earth of its treasures. Man, with his mind and genius, his faculty for inquiry and discovery, soon rises up from nature's work to measure the systems and planets of the world, holding communion with divine intelligence on the threshold of space and its immensity.

Slowness of Progress.—Man seems to acquire by degrees his ideas of things, he discovers what is beneficial, what injurious; he knows fire, water, air; he learns the art of the chace, arms, &c.; he finds out the principle of society and government, founds religious systems, and pursues the arts of trade, manufacture, and commerce. All this is done slowly, evils, difficulties, dangers are to be overcome; ages might have rolled away before discovering the method of making a fire, an arch, a wheel, or a loaf of bread. How long would it take to form society, and civilize man, as he is now civilized in England? What a time to store up knowledge, discover new ideas, and base discovery on these again? What may man progress to in the system of accumulating new ideas, and what changes are there not still perfecting and to perfect? The age of various races is conflicting. The Egyptians say their nation was founded 20,000 years before Christ; the Phenicians 30,000; the Persians, 100,000; the Babylonians, 480,000; the Chinese, 2,276,479; the Japanese, 2,362,594; and the Indians, 3,982,298. Geology at least proves that myriads of ages must have been employed in forming a rock out of insects, which line of formation now dips under the German Ocean in England, and appears again on the continent, yet every particle was once a living, moving mass. We can only feel our humility when studying the race of man and nature.

(To be continued.)

OVER-WORK OF FACTORY CHILDREN.

If we examine into the working of the system upon the little girl, we will find her engaged in piecing, at the laborious attendance at the spinning frame. If we visit another department of the factory, where the cotton undergoes the first process, where a machine called the devil tears the fibres into pieces, and opens and expands the material before it is to be twisted, we enter the scutching room. We find the little girl in attendance at the machine, where the atmosphere of the place is not only hot, stifling, and oppressive, but where it is loaded with the dust and flakes flying from the cotton. Look at her face—or it may be that of the boy—and it is not white, but sallow and bloodless; the lips are baked with the dirt and cotton fibres, the hair is matted with the flying impurities,

and the clothes spotted over as if a shower of flaky snow had fallen upon the person. When you look more closely at the child, you see the finger of disease tracing its ghastly marks over the frame of the little sufferer, and, on inquiry, you will most probably find the incipient symptoms of consumption. How can it be expected to be otherwise, when the youthful springs of life are not cooled by the invigorating breeze, and the early pulsations of a tender body not quickened by the impulse of an exciting game? How can it be otherwise, when the infant mind is roused like a fire within a feeble shell, and when the unnatural attention required from the dawning intelligence of the child consumes the vigour of a feeble frame? How can it be otherwise, when we consider the long hours of restless labour, and are sensible that instead of the lungs being filled with pure and fresh air, each inspiration loads the throat and the tender air passages with clogging dust and oily fibres from the flying cotton? Look at the child returning from the factory, and draw near to it in its home, and even there it brings the unhealthy dust upon its skin, and is offensive with the oily smell which arises from its contaminated body. The spirit of the child is broken—the amusement of the child taken from it. The skin of the child obstructed in its healthy functions, and the vital operations of life, the respiration, poisoned with dust and cotton fibres. How, then, can the objects of nature be carried out, the wants of nature be supplied, the intentions of nature fulfilled, and the health of the child sustained whilst it is imprisoned for twelve hours, and lives only amidst filth and impurity. You might as well seek the stream to be pure and undefiled, bright and spotless after the fountain had been paddled and polluted. You might, with the same reason, expect health and joy to await on the path of life after the infant's existence had been cankered, poisoned, and overthrown in the very spring-bud of its existence.

Of what is every parent so careful and anxious as about the health of the daughter, the soft-made and delicate female. Look to the tender sport which nature designs for the development of the beautiful frame. Look to the caution which is observed in schools, and the utmost care which is devoted, to nourish the lovely plant through childhood and youth. Why? that the frame of the delicate woman may be planted on health, that the power of her constitution may be freely encouraged, and the health of the girl contribute to the fine symmetry and graceful elegance of the woman. The very beasts of the field protect the females of their species, and the birds of the air accompany and protect the sly, retiring, and timid companion of their little life. The humblest and the highest in the land have been taught, by the impulse of natural affection, to protect and nourish the females from the rude shocks of labour, to which the male is alone adapted. Like a tender and beautiful flower destined to adorn some future house, and shed a radiance around some fireside; a shield is thrown over the budding stalk, and carefully and anxiously is it preserved from the frost of hardship and the biting canker of disease. Woman

was first made to be a mate and a companion to man, to delight him with her loveliness, and to sooth him in his labour with her care, her affection, and her tender attentions.

Is this labour in the factory calculated to give health to the young girl, and convey grace and symmetry to the face of the woman. Nature says, No; reason says, No; and philosophy says, that this is the only way to frustrate the physical energy of the child, to bend and make crooked its frame, to poison the growing springs of its life, and to leave a mark upon the young and rising twig, which will widen as it grows, and bear it as a conspicuous mark throughout the stages of its future existence. Consumption, nervous affection, and crooked and distorted limbs are not the only consequences of this cruel and protracted labour for the female child in the factories; and fortunately for society, fortunately for the disfigured female, death makes havoc amongst the weakest, and leaves none but the strong in body to contend with the canker of their youth, and perform their destined duties for another generation of mankind. Like a blight descending upon a rising crop, or falling amidst a field of young and springing trees, the weak, the sickly, and the faint perish amidst the storm, and the naturally vigorous only survive to live shattered and weakened in their natural proportions. Like the march of young recruits in a long campaign, the severities of infant labour overtake the weakest, and cast them down under the destroying curse, leaving only the strongest to meet the brush of future hardship, to encounter the shocks of privation, overwork, and exhaustion, and in the noonday of life bring on the dimness of advanced life, and the sorrows and weakness which afflict man in the evening of his days. We must leave the young to their scourge, and the rising shoots of another race of men to be struck down in the bud, by the curse of overwork; and now let us consider another division of labour in the factory.

(To be continued.)

ALLEVIATION OF THE PAIN OF GOUT.

The application of carded cotton to burns and scalds is now so generally approved, that most families have it lying by them ready for use; and in this shape it is sold in the shops. About twelve months ago, a gentleman in this city, while writhing under the gout, read in the newspaper some instances of the success of this article in burns, and it struck him that it might operate with equal advantage upon his burning toe. He accordingly had his foot swathed in carded cotton, and in twelve or fourteen hours the inflammation disappeared, and the pain along with it. He has had several threatenings of a return since; but the cotton was immediately had recourse to, and to that he ascribes the removal of the pain. To say that this application will afford similar relief to all persons, or even at all times to the same person, would be quackery; but it certainly appears to be a harmless experiment in an excruciating ailment.

USE OF PHRENOLOGY.

The following singular application of phrenology, in the medico-legal investigation of a murder, has recently taken place in Paris.

Several years since a female disappeared from her house in the Rue Vaugirard, and no information respecting her was obtained until a very short time since, when an intercepted letter led to a search for her body in the garden at the back of the house. A skeleton was there found, and a minute examination of it was directed by the police to be made. M. Dumontier, professor of phrenology to the society at Paris, was, accordingly sent for one evening, by M. Orfila, without being told the object of the mission. Introduced into a room where were assembled the Procureur du Roi, municipal guards, agents of police, the suspected persons, and others, M. Dumontier was desired to determine, whether the bones presented to him all belonged to one and the same individual of the human species, and to state his opinion of the sex and age of the individual to whom they belonged, and the period of time that the bones had been interred. Having examined the skeleton with attention, and put aside some bones of animals which had been mixed with them, he carefully examined the head, and decided that the skeleton had belonged to a woman, that she was advanced in age, and that the body had been interred several years. But the surprise of the spectators was at its height when the physician, continuing his remarks, commenced to speak of the character of the person whose skull he held in his hand, declaring that she was miserly, and of a violent temper, and adding other details, all of which were perfectly conformable with the known temper and character of the missing woman. But two centuries ago, as the crown solicitor observed, a similar divination would have led its author to the stake. Nevertheless M. Dumontier is no magician, but a distinguished pupil of Gall and Spurzheim. The facts cannot fail to excite the interest of those who believe in the truth of phrenology, and the curiosity of those who doubt it.

DIET.

The seeds of plants form the next division of articles used by man as food—the chief principle they contain as nourishment is starch: that forms the principal part of the nutritious portion of our food. Starch is composed of various substances; seven parts of hydrogen, fourteen carbonic acid and forty-nine oxygen gases. We may thus enumerate the articles used in diet, from the seeds: wheat, barley, rye oats, millet seed, rice, Indian corn, &c. The wheat is the most commonly used as food in England in the shape of bread. The flour is, however, much adulterated by mixture with bone dust, potato flour, and ground beans. The best bread is by no means the whitest, as the miller always prefers for his family, bread

containing the bran in it; and we believe it to be most wholesome for man. In making bread the flour is moistened and kneaded, the gluten cementing the particles together. Yeast is then employed to cause fermentation, when saccharine matter is created, and the starch is converted into gum and water, all heaviness in the food being thereby avoided. When the dough is placed in the oven, the heat forms carbonic acid gas, which, acting upon the elastic substance, swells it out, and forms little cells. Some bakers, who like puffed bread, use ammonia, which rapidly raises the bread, and makes it as full of cells as a sponge. The bread thus is light and porous, and swelled out to twice the size of the dough. This is highly necessary for good digestion, as every part of our food should be well divided, and the more porous bread is the easier it can be digested, the gastric juice finding its way rapidly through the mass. All concentrated food is difficult to digest, and is not adapted to man as his sole food. Even horses do not thrive if fed only on corn; bran and chopped hay, &c., being always necessary, or beans and peas mixed with their food. Thus, in eating concentrated soups a large quantity of bread should be eaten with them. All nations aim at the formation of a light bread food. The Laplanders who cannot grow wheat form a species of bread from the bruised bones of fishes and the juice of the pine.

Barley, in point of nourishment, is inferior to the others. It is composed of resin, one part; gum, fifteen ditto; starch, fifteen ditto; gluten, sixteen ditto, and hordien, ten ditto. An excellent preparation for invalids is made from barley—the barley-water. We need say nothing here of the *barley brew*, which every body knows.

Rye meal is composed of three parts albumen, nine of gluten, eleven of mucilage, sixty-one of starch, and sixty-three of saccharine matter. The propertion of starch proves its nutritive qualities. The rye is, however, subject to a disease. It is an enlargement of the ear, which becomes black, and is highly poisonous. The product of this disease is called *ergot* of *rye;* and it is justly supposed, that the ancient plagues were caused by people eating the diseased rye. In fact, if taken in any quantity, it produces gangrene, swelling of the glands, and the limbs would drop off The ergot is used in protracted cases of labour, and generally expedites the delivery of the woman. The millet seed is exceedingly wholesome; but is not much used in this country. Rice is more commonly eaten than any other of these kinds of seeds, and particularly in Asia. It contains a very small quantity of sugar; but it has eighty-four out of the hundred parts of starch, with scarcely any gluten, which is a striking evidence of its powers of nourishment. It stands only second to Indian corn, in regard to nutritive qualities. The Chinese prepare beer from it. Rice and milk, for invalids or persons in health, is highly to be recommended as a light agreeable diet, extremely nourishing. Oatmeal is much used in Scotland, and is apt to create scorbutic affections; more particularly where the crowdy is used, which is made by pouring

boiling water over oatmeal, and stirring it round. It creates heart-burn, and is always heating, as a diet, unless boiled into porridge, in which form it is not only very nourishing, but entirely unobjectionable in any point of view. Oatmeal is employed in a very useful preparation for invalids—viz., in the composition of water-gruel. The way to make it is as follows:—Mix by degrees a table spoonful of oatmeal with three of water, until they are duly distributed one with the other, then add a pint of boiling water, stirring it occasionally whilst it boils for the space of five minutes: let it be taken when agreeably cool.

We have, as far as our space would allow, rapidly sketched over the substances used as diet in the vegetable department. Next week we shall touch upon *animal alimentaries*.

HOW TO CHOOSE A NURSE.

There are extreme cases in which nurses have to be engaged, and medical men are forced to recommend them. The following rules may, therefore, be of advantage:—

First. The nurse's milk should not be older than six or eight months, at the utmost.

Secondly. She should have a good constitution, and be free from every hereditary affection.

Thirdly. Her own child should be proved to be in perfect health, and thriving.

Fourthly. She should have a kind disposition, and possess a good character for virtue and honesty.

Fifthly. She should be of an intelligent character.

Sixthly. She should possess a strong affection for children.

Seventhly. She should be a very temperate woman.

Eighthly. She should not be permitted to give the child any other nourishment than the breast.

Ninthly. Her residence should be in an open, healthy, country place.

Tenthly. Her circumstances should be good enough to prevent the necessity for much physical exertion, such as washing, &c.

Eleventhly. She should be clean in person, her house clean, and her own family show evidence of her attentions in these respects.

Twelfthly. She ought to be a person who has seen service in families.

Thirteenthly. Position of dwelling, habits of family, number of ditto, temper, morality, temperance, and, above all, length of life of ancestors, should be considered the cardinal points upon which earnest inquiry should be directed. Find a woman who will meet all these requisites, and you may, in *extreme cases*, trust an infant with her.

THE SNUFF-TAKER.

"WHAT have you got to say, sir?"

"Why, doctor, I want your advice on the subject of my general health. I have a very poor stomach, and digest my food badly. I have frequent pains shooting through the stomach, and even up to the head. I have little relish for my food, and have grown a good deal thinner of late." Out came the box, and the recital was interrupted by a most comfortable pinch.

"What! you are a snuff-taker? But I need not have asked, for your voice betrays you as readily as if you had no palate at all; and——" But here a stream of pent-up matter—tobacco-juice which had been brewing in the nose—descended like two muddy streams, trickling into the mouth. This was enough.

"Now, sir, you must be aware that that powder you force into your nose destroys the power of smell, and diminishes or benumbs the feeling of the part. Nature has been very particular in distributing nerves within the nose, to enable man to distinguish agreeable from disagreeable smells, and they are useful in all that concerns food. I very much question if the smell of spoiled venison or game would reach your brain at all. The nerves are benumbed, dead, and comparatively useless, except when they get a fillip up with a pinch of ground glass and lettuce leaves;—the close communication between the nose and brain will, of course, affect that organ materially. The tobacco acting upon the brain, of course the nerves of the stomach are re-acted upon again, and its efficiency in digesting food considerably lessened. Hence indigestion, headache, emaciation of body, and sluggishness of the brain."

"I experience all these, sir; but I did not think snuffing was the cause of them."

"Don't you swallow a considerable quantity of snuff?"

"Certainly. It goes down my throat, and I have to make an effort to spit it up again. At night I feel it worst."

"Exactly: because you fill the nose full, and allow it to soak away into the stomach. The quantity taken upon the stomach of pure tobacco, would certainly produce a temporary loss of sensation all over the body; as it is, it paralysis it so much as to destroy appetite. Good God! do you take it with a spoon?"

"Yes, sir, sometimes."

"Well, sir, if that is your *spoon meat*, you need not be surprised at the loss of appetite,—it is a wonder that you have any at all. Your mental faculties must be considerably impaired. The organ of thought has its vigour of perception lessened by one of its senses, that of smell, being cut off. Through the senses and their keenness we derive much pleasure and increased capacity. You may observe that deaf people are very sluggish in mind."

"My mind is decidedly not so clear."

"Well, the brain whose health and activity constitutes the sound, strong mind, the most important system of the body—the

nervous—is injured; then the next in importance—the digestive system—is assailed, either through the nerves, or from direct contact with tobacco-juice. The organs of direction and thought, and the organs of strength and support, are both considerably weakened. How, then, can you expect either a sound body or a clear mind? How can you expect me to prescribe for effects, when you hold the cause in your hands? And, as I declare, you are now deliberately sliding your fingers into the box, to add fuel to the fire you complain of. I fear there is no hope for you."

"I did not observe it, sir."

"Such an habit, then, is an insensible enjoyment. You waken up with the pinch like a gin drinker after his dram, but only for a moment. Use brings the stimuli down every day, until there is habitual torpor or lethargy of body. Your mind is blunted, your voice and articulation gone,—your stomach upset, and its action vitiated. Throw the box away, and secure health. Give up a habit that is, at times, *really sickening to look at, dirty to indulge in, and amazingly silly to continue.*

RECEIPTS.

Anderson's Pills.—We have occasionally recommended the pills: the following is the receipt, which was one time scouted as a quack remedy, but which is now used extensively:—Take of powdered Barbadoes aloes, one ounce; jalap, six drachms; black hellebore, two ditto; ginger, two ditto; sulphate of iron, fifteen grains; oil of anniseed, ditto: mix, and beat into a mass with alcohol.

Marking Ink.—Nitrate of silver, four scruples; pure water, six ounces; gum acacia, two ditto.

Harrogate Salts.—Sulphate of tartar of potass, two ounces; common salts, twelve ditto; sulphate of potass with sulphur, half an ounce: mix.

Buttler's Effervescing Powder. — *Blue Paper.* — White sugar, four grains; Rochelle salts, eight ditto; carbonate of soda, two scruples. *White Paper.*—Tartaric acid, ten grains; essence of lemons, several drops.

Worm Powder.—Jalap, senna leaves, powdered cream of tartar, equal parts. Dose for an adult, one drachm; for a child under four years, ten grains. A capital combination.

Tumour Plaster.—Half an ounce of camphor, six drachms of assafœtida, beat into a mass, and spread upon a linen rag. This is recommended, but does not always succeed. We would recommend a few drops of iodine in the mass; and a blister, in all old-standing tumours, before the application of the plaster.

DYSENTERY

Is a much more fatal complaint than most people imagine. We have known people, who were in the habit of taking a glass, to be swept away by dysentery in the course of a few hours or days. It is a general rather than a local disease, and has been caused by improper diet, exposure, &c. Those who dwell in hot climates, and who return to ours, are apt, if afflicted in the least with fever and flux, to have a return of it in our country, after catching cold. We have seen dysentery produced by drinking cold water, when travelling and very hot. Some armies have been nearly decimated in consequence of the young soldiers drinking water on a march; a practice which every old soldier would avoid. The *general symptoms* in such cases are, a bearing down of the seat, straining, severe griping, and discharge of a watery substance instead of the stools. The febrile affection varies with varying constitutions; and it would seem, from past experience, that dysentery establishes a peculiar action in the lining membrane of the abdominal viscera, or bowels, which slight causes may at any time bring on again. In an acute case, there is great inflammatory action, which, in the treatment, requires bleeding, leeching, and sometimes cupping. Blisters are at times very serviceable. If it be a chronic case, an astringent of the sulphate of copper has proved highly beneficial; half a grain being the dose for every six hours. We have treated a case of dysentery produced by cold water drinking, when hot, which we cured by half a drachm of laudanum, a little prepared chalk, and the white of an egg, night and morning, or a teaspoonful often during the day.

Dysentery is much more prevalent in the east; and what is known here as a sort of fruit dysentery, or summer dysentery, must not be compared with it. The inflammatory stage is at times very dangerous, and requires strict medical attendance. The *chronic*, on the other hand, saps the constitution, and is sometimes allowed to exist until there is a diseased action of the mucous membrane established, which is very difficult to cure. Raw fruits, new spirits, drinking cold water on a journey, when perspiring, are amongst the principal sources of this annoying complaint. The best way to begin, is to open the bowels gently with castor oil, subdue the inflammation, and arrest the discharge by administering either the sulphate of copper, or laudanum, the white of an egg, and prepared chalk. The arrested perspiration seems to cause the perverted action of the bowels. This sympathy between the skin and bowels is remarkable, and the restoration of the natural discharge of the skin is highly beneficial. Hence, warm baths are highly important at proper periods, and should be employed. The diet should be sparingly animal, and more vegetable; that is to say,—rice, sago, milk, &c. When there is any sinking, in chronic cases, a glass of good port wine, or the very best brandy, will do no harm, if no inflammation be present. Burning the brandy is very absurd, as thereby the whole spirit

evaporates. On the whole, we approve of a dose of castor oil, then opium, chalk, and the whites of eggs, accompanied with action of the skin, which should be stimulated by friction and baths to do its duty, and restore the discharge by the skin instead of through the bowels.

THE FRUIT SEASON.

INJUDICIOUSLY eating fruit, uncooked and without sugar, is highly to be blamed at the present season, which is, perhaps, as much the *doctors' own* as any other. The skin of any fruit should be most carefully avoided, as it is apt to produce diarrhœa. The French generally, and very properly, eat cherries, currants, &c., with bread, taking large quantities of the latter, which combines with the juice, holds it in suspension, and allows the gastric juice to perform its duty quicker, and with greater certainty. When a looseness is brought on by fruit, the best remedy is beef or mutton, lightly dressed. We recommend the greatest care in the use of unripe fruit, and would advise its being cooked before being used. Avoid plums, as they are unripe, and the bloom, if ripe, is not at all wholesome. We must confess that we never have, however, seen much evil result from uncooked fruit, if plenty of bread was consumed with it; and we assure our readers it heightens the enjoyment considerably.

REMEDY AGAINST HYDROPHOBIA.

A GENTLEMAN of the name of Noteaux, living in the *chateau* of Bourgel, near Foix, in France, has given the following recipe for the above afflicting visitation. It was kept a secret in the family during two centuries. This gentleman, on his death-bed, although he had taken an oath never to reveal the secret, asked his confessor if he ought to abide by it, knowing that so much benefit would result to mankind by its being made public. The priest replied that it was an imperative duty to publish his recipe. Many copies were taken of the declaration, and widely spread. The following is guaranteed to be a faithful copy made by the editor of the *Family Doctor* himself, when in France. Take of rhue, sage, the wild, long-stalked daisy, leaves and flowers, as much as may be lifted between the finger and thumb; add of the root of sweet-briar and scorzonera, the same quantity. Hash them all down separately. Add, also, five or six cloves of garlic. Pound the roots of the wild-briar and sage first: then mix and pound together in a mortar all the others. Add a teaspoonful of coarse suet, and mix them all well. Pour in half a wineglassful of white wine, and pound them all again. Strain through linen, and squeeze out the juice. The liquid should be drank nine days, nothing being taken before it, and nothing for three hours afterwards. M. de Noteaux died in 1820. This remedy has been effectual in all cases. Animals should have milk instead of wine.

CONVULSIONS,

In children, are generally produced from the irritation of teething, or worms, or of some indigestible matter in the stomach or intestines. If from teething, we have already spoken of the remedy, as well as for that of worms. We have seen cases where neither could account for the violent fits. The evil lay in the intestines, in which some irritable matter was exciting all the nervous commotion: the teeth are clenched; the eye fixed; and cold perspiration oozes from the surface of the body; and the shivering spasms occur at intervals. In such a case, there is nothing like a warm bath; and, as soon as possible afterwards, a little calomel and powdered antimony should be laid on the tongue, mixed with sugar. On the least appearance of convulsions approaching, which the twitchings about the mouth will indicate, put the child instantly into the bath upright, and send the water in a stream over the shoulders and down the spine. Don't wait to dry the child, but wrap it in a flannel petticoat and keep it between the blankets, where it will, ten to one, perspire and sleep gently until the action of the calomel arouses it.

We had a little girl who swallowed a shrimp whole, and had convulsions, which we treated in the above manner with speedy success. Great care should be taken of what children eat, as the least thing which is improper irritates the delicate mucous membrane of the stomach, and hurries them off, sometimes in a moment.—Try the bath; and trust to it.

Dr. Radcliffe was remarkable for his expedients in extraordinary cases. He was once sent for into the country to a gentleman dangerously ill of a quinsey. Perceiving that no application external or internal, would be of any service, he desired the lady of the house to order the cook to make a large hasty pudding, and to let his own servants bring it up. It was accordingly set piping hot before the patient. "Come, John and Dick," said the Doctor, "you like hasty pudding: eat it as quick as you can." Both commenced operations: but John dipping twice for Dick's once, the latter slapped a spoonful of the pudding in his face. John returned the compliment in a double dose, that nearly blinded Dick, who was so exasperated, that he took the pudding by handfuls and pelted his companion. Both seemed moving hasty puddings. The patient, who saw it all, could not refrain from hearty laughter. In fact, so much was his fancy tickled, that the quinsey burst and discharged its contents. Radcliffe completed the cure; and the two servants were amply rewarded, after the joke had been successful.

A Country Apothecary sent a lady three draughts. The first, he said, was to warm the patient; the second, to cool her; and the third to regulate both.

INVALID'S CORNER.

"Amusement is conducive to the restoration of health."

THE POISONER.

(Continued from page 94.)

PART III.

In a grand vaulted chamber, ornamented with paintings on sacred subjects, and lighted by windows of stained glass, there were seated on an oaken bench three young girls, dressed in the costume of the sisters of mercy.

"I pass over those details which concern me, and would interest you but little,"—said the youngest of the religious order, reading a letter,—"and I now come to that great event which now agitates all Paris. Hear then, sisters, what my brother has written on that subject, who is one of the youngest and handsomest officers of the regiment of Tracy :—'I promised you in my last, my dear Amelie, to recount to you the surprising history which is attached to the Poisoners of Paris. I may be tedious, but I shall at least keep my word. So that you may easily comprehend what is about to follow, I must refer to the year 1658. At this time my regiment possessed a brave captain without name or fortune, (he was generally called St. Croix,) who became, no one knows how, the intimate friend of the Marquis de Brinvilliers, colonel of the Normandie regiment. The marquis introduced him to his wife, and as our excellent novelist, La Fontaine, has it, the two lovers loved with the most tender affection. Everything went on well for some time. The *noblesse* shut their eyes to the intrigues of the marchioness, as well as to the foolish amours of her husband. But M. d'Aubray, the father of the marchioness, obtained from the king a letter under the royal seal, and lodged St. Croix in the Bastile. St. Croix encountered in the Bastile a person known as Exili, an Italian poisoner, who supplied him with the means of revenging himself on the civil lieutenant. Set free in 1661, he arrested the legal proceedings of M. d'Aubray by poisoning him. The magistrate's sons having doubts as to this sudden death, had the body opened, but no trace of poison was discovered. A twelvemonth after this event, the only surviving person in the family was the Marchioness de Brinvilliers. These three deaths aroused the suspicions of justice. Searches were made, the innocent tortured, but still the culprits escaped, and would have evaded the penalties of the law but for an extraordinary circumstance. The Commissioner of Police, Picard, having received secret intelligence, presented himself at the house of one named de Breuille, who dwelt near the Place Maubert. What was his surprise to encounter there a rich and influential landlord, from the quarter Saint Marcel, and to find M. de Breuille (who was no other than St. Croix) poisoned by his own preparations. The following are the reports which are circulated on this head. Some say St. Croix is innocent, and that he was killed whilst endeavouring to discover the philosopher's stone. Others believe him guilty of having prepared poisons, but it is

asserted that prompt remedies restored him to life. Why, in such a case, I ask, do they not bring him to judgment? Do they wait until his accomplices are arrested before his resurrection is proclaimed? I am ignorant of all. The opening of a coffer established his guilt. A correspondence which he maintained with the Marchioness de Brinvilliers was seized; also that with Pennantier Belleguise, de Caumont, and other persons of a very high rank in society. This correspondence proved that the marchioness had poisoned her own father, and that Belleguise and Pennantier had committed many crimes, through the aid of poisons furnished by St. Croix. It also made known a certain Lachaussé, formerly in the service of M. Dreux d'Aubray, as being the principal instrument employed by the infamous marchioness and her lover. The commissioner, surprised at a discovery he did not expect, proceeded to the hotel of Madame de Brinvilliers: no person was there. The rich and criminal heiress of d'Aubray had set out the same day for a convent." '

"For a convent," repeated the two religious sisters, interrupting the youthful reader; "and for which?" inquired they with interest.

"If," replied Amelie, "you had allowed me to conclude, I should have saved you the trouble of interrupting me.

"'For a Spanish convent or an Italian one. That at least was all they could learn from her old attendant, who was deaf, obstinate, and entirely devoted to her mistress. M. Picard retired, after having examined all her papers, when on passing the house of M. de Caumont he perceived a crowd of persons. He approached, and learned that a valet of M. de Breuille (St. Croix) had attempted to corrupt the servants of M. de Caumont, so as to procure their aid in mixing a certain liquid in their master's wine. M. Picard arrested Lachaussé (for it was he) and conducted him to the Chatelet. This wretch, to save himself, accused the marchioness and St. Croix, but no dependence was placed in his revelation, and he was broken alive on the wheel in the Place de Greve, amidst general acclamations. At the moment I write, the Marquis de Brinvilliers has been killed in a duel, in which he was avenging the honour of a certain Eulalie, formerly an actress in the theatre of the Petit-Bourbon." '

"Change the subject, sister, and let us speak about your Alfred."

Amelie paused suddenly and blushed.

"Only look at the little close-minded lady," said the sister, who had first interrupted the reading of the letter. "She never told us of her *own* Alfred," resting with intention on the accentuation of the pronoun.

Amelie folded up her letter, without regarding the reproach, and placed it in her bosom. She was about leaving her companions, when a sister seized her hand, and said in a low voice,

"I have gathered up almost all the fragments of sister Marguerite's letter, the saint, as we call her, and I expect shortly to know what they contain."

(To be continued.)

ANSWERS TO CORRESPONDENTS.

E. P., Stockport.—No doubt her symptoms arise from her occupation in a great measure. Try a couple of colocynth pills at bed time, twice a week, and drink at mid-day some sound porter. The child should avoid butter. Open the child's bowels with a little castor oil, and rub in on the sore some of the golden ointment.

W. B., Ludborough.—He is right as to our pages; wrong to leave matters alone; and would be all right if he applied to any one who understood the complaint.

Jacob, Glasgow, does not say if there is any spinal complaint. The disease seems evidently to be in the hip joint from his statement, but sometimes the same symptoms have arisen from affection of the knee. The case should be treated for chronic inflammation in the joint itself. It is not acute, therefore blisters kept open, or tartarised antimonial ointment rubbed in so as to raise a succession of pimples ought to be tried. The latter may suit his business best. Exercise, of course, is not to be recommended, but bathing is. A stream of cold sea water over the hip might be tried at once, every morning, or during intervals of blistering or the use of the ointment. Constitutional treatment must also be attended to, and a mild, generous diet, without much animal food, should be studied. In a case like that, we should like to see the person, however.

Onnan.—In an older person the case would be hopeless, and the employment and habits, unless altered, would prevent a cure. A few of Anderson's pills would be useful occasionally, and at proper periods. The system wants support. Warm sea bathing, of course at proper times, I would recommend; that can be had at home. Wear flannel and drink no whiskey, but wine, or good porter.

J. P. L.—If the bowels are open, and the skin gets warm and the body in a glow after bathing, try for a week only the following pills.—Three grains of blue pill and half a grain of opium, made into one, taken at night, each second night. Write again.

A Grateful Heart.—Take four grains of extract of colocynth every second night. Drink a table-spoonful of infusion of quassia thrice a day. Change of scene, company, and amusement will put all right.

Philo-Homo, Hull.—We cannot understand his allusion to bleeding the *under lip with leeches*, as we cannot see any necessity for such an operation at all. The lancet would be decidedly the only judicious means if bleeding was required *there*, but we never saw it done, never would do it ourselves, and certainly never would recommend it to be done. We are no advocates for bleeding except in case of extremity, such as apoplexy, or in the commencement of violent inflammatory affections, such as of the lungs or bowels. Bleeding, we think, in all cases bad practice, and downright murder in chronic affections. We have seen scores killed by bleeding in rheumatic fevers. In short, our lancet has always been like the soldier's bayonet, used only in cases of very great extremity.

John Power must give up both pipe and pot. Use, say twice a week, six grains of extract of colocynth, made into two small pills, at bed time, and drink every morning one drachm of tincture of rhubarb, and four of the acetated liquor of ammonia. Buy it himself for about three-halfpence. Use this for a fortnight, and give us the result.

Laterum Structor.—There can be very little doubt, we think, as to the cause; and in these cases, the whole of the digestive powers are thrown out of order, and the system generally upset. There seems to be a rheumatic tendency as well. Constitutional treatment is the best. First, the bowels must be kept very regular, although no strong physic should be taken; secondly, the diet should be exceedingly plain and nutritious, with little animal food. No spirits must be drank. Home-brewed ale or good bottled stout may be used in moderate quantities after dinner, and in the evening after supper. Damp, wet, &c., must be avoided, flannel worn, a warm bath taken once or twice a week, and the utmost regularity in all that relates to sleep, food, exercise, &c. In about ten days we will be more safe in giving the prescription we have in our mind's eye.

Patentia Bramton.—His affection of the heart seems more to be sympathetic than real. Open the bowels with a couple of colocynth pills, live very temperate, and be under no alarm. Try at noon a raw egg in a small glass of port-wine, the day after the pills are taken, and continue it for about eight days.

E. P., Manchester.—Varicose veins do sometimes burst; but that happens more frequently to women. Why not have it cured. It is simply done by a new system of a ligature, which no person but a surgeon, however, can safely attempt.

J. P. W.—It must be cataract, and the eye should be couched.

J. B., Preston.—Yes. Cold bathing, if it is accompanied with weakness. Dragon's blood is the most commonly used.

A. G. C., Crieff.—It is scrofula. See receipt in No. 7.

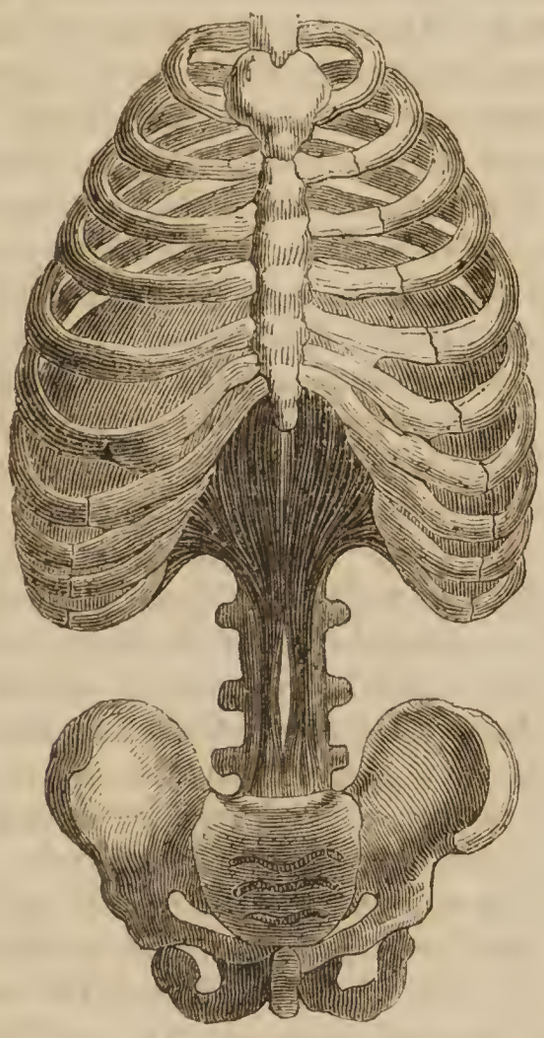
N.B. Medical advice will always be given to any person, *gratuitously*, through the pages of the DOCTOR: but it is necessary to give *age, sex, employment, symptoms of disease, length of its duration, together with the most probable cause, or at least to describe the commencement of the attack.* If *private advice*, by letter or otherwise, is solicited, it will be attended to; but any one may have advice through the above medium, *viz., answers to correspondents*, without the necessity of giving their names, or the possibility of their being made known: only, there may be questions which we shall decline answering in our pages.

THE

FAMILY DOCTOR.

ILLUSTRATED.

No. 9.] AUGUST 2, 1845. [PRICE 1½*d.*



THE ABDOMEN.

THIS term is derived from the Greek word *abdo*, to hide—because within the cavity are concealed the abdominal viscera or bowels. Anatomists divide the body into three portions: the head, the trunk, and the extremities. The head contains the organs of thought—the brain. The trunk, again, is formed of two cavities. The upper portion, above the membrane, which divides the trunk into two parts, is called the thorax; the lower division is the abdomen. If the reader ever noticed the carcase of a sheep hung up at a bucher's door, he will observe a membrane stretching across the cavity, like a partition between two rooms. The design will show that. This membrane is called the *Diaphragm*, from the Greek, signifying to divide. The trunk is thus pretty equally divided by it into two parts.

Above it are the lungs, heart, and great blood-vessels; below are the stomach, intestines, liver, spleen, kidneys, and large blood-vessels. This membrane is, as the plate will show, attached by muscular fibres to the backbone or spine—the structure of the diaphragm renders it a moveable, varying, fluctuating substance. When the air is expelled from the lungs, this membrane rises up as the lungs contract. When the air is inhaled, it descends as the lungs expand. Nature designed this motion for many important ends. It is necessary for the due action of the lungs, and very important in digestion; because, through its movements, the intestines are lifted up and down, the more rapid the motion of the body the more rapidly does it fulfil its duties. Hence, in exercise the diaphragm is constantly in motion, accelerating the progress of digested food and the excrement. It follows the action of the lungs, and has a considerable influence over them—as in laughing, which seems to be a spasmodic effort of the diaphragm. When a person laughs heartily, we all know it promotes digestion. His diaphragm may be said to be tickled, the lungs partake of it, and the hearty roar of laughter creates the same motion in the intestines. Through the agency of this membrane, as much good may be effected by fun as by running. A person sitting at dinner in good company may thus derive nearly as much benefit as if his legs were hammering on the highway like a pair of drumsticks. Sneezing may be said to originate from the sensibility of the diaphragm. Therefore, it is that we hold our sides with laughter, and generally place our hands exactly over the position of the diaphragm, instead of over the lungs, which are above it We feel sore just there, and nowhere else; the abdomen is, as we have stated, divided from the chest or thorax by this important membrane. It is the boundary of the abdomen above, as the *pelvis* or basin forming the hip bones is its boundary below. The spine, as the plate will show, joins the chest (protected by the ribs, breastbone, and bones of the spine) with the pelvis or basin. The ribs and breastbone are familiarly known. The bones of the spine are termed vertebrae, and the whole combined, the vertebral column. The plate itself will form an exceedingly good illustration of the skeleton of the chest and pelvis together with the dividing membrane. In number 2nd, we showed the viscera entirely in the thorax and abdomen, divided by the broad line of the diaphragm. Next week we shall give the entire of the trunk in the natural state, with its external divisions.

THE HUMAN RACE.

The Hunting Tribes.—Whilst some races begin with wild fruits and vegetables, roots, insects, or shell-fish, the wild men, who have an opportunity, hunt, kill, and eat the flesh of animals. It is with them a life of hunting and fishing, and all their intelligence being confined to

the art of catching animals and fish. There is little chance of their stepping out of the narrow circle to which their intellect is confined, unless by coming in contact with more civilized races. It must be remarked, however, that the want of any constraining dress, the free motion of the limbs, the liberty of the wilderness, and the excitement, exercise, and activity of the chace, combine with invigorating food, to make the American savages—a tall, handsome, powerful race of men. They grow up, unrestrained, like a pine upon the mountain, and step with elastic motion through the forest: the nostril dilated with the keen air, the breast expanded, and the limbs as free, and almost as supple, as those of the bounding antelope. It is hardly possible for the human frame to reach greater perfection, except when there is a cross between the red and white men. The half-breeds are considered an exceedingly handsome race of men. A *pastoral people* are, on the other hand, quite different in character and disposition. The food of the tiger and the lion convey to the hunters a sort of kindred ferocity, whilst their being constantly engaged with wild and savage animals, whom they must tame or subdue, their character for boldness, bravery, and endurance becomes more marked. The pastoral race, brought up amidst tame and tractable animals, and living on milk, cheese, butter, and vegetables, may be, and are, a healthy race—even tall and strong, but generally clumsy and soft. The stamina, which the desert, its food and exercise, give to the constitution, is here wanting; but the pastoral race gain on the other hand in point of intelligence—they do not occupy their time in catching to kill or to tame. The latter is done already; and, consequently, the mind is left to devise buildings, instruments for cultivation, drainage, and defence. The savage runs in a ring, the pastoral race plod on up the hill of discovery, advancing every year in the conquest over their wants, devising new means of making dress, of building and transporting materials. Sure to be at war with neighbouring tribes, who envy their flocks and wealth, they have leisure and means to invent guns, swords, and spears. They protect themselves by these, and subdue, in turn, the rude savage. Then launching into the stream of commerce, they carry away what they cannot consume, bringing back what they require: progressing, by degrees, until every shore is visited—as in the instance of Great Britain, by her merchantmen. Every sea reflects her flag, every tide rolls wealth and endless articles of utility upon her shores, whilst her booming cannon testify, that although engaged in peaceful pursuits the power is at hand to make every one of her people all over the world walk unscathed, like the Roman, by simply exclaiming, "I am an Englishman." What I wish more particularly in this instance to do, is to point out to the reader that the moment we forsake the field or the forest to enter into the channel of trade and commerce, the human race must necessarily suffer in size, strength, and beauty, whilst they progress in intellect and mental endowments. The customs of a civilized society have much to do

with the growth of man and the perfection of the race. Binding, after birth, tight clothes, shoes, stockings, all exercise their influence over the development of the human frame. Stays for young girls have a most pernicious effect, not only on their own constitution, but also on the health and strength of the children they are destined to bear. Everything which restrains the development of muscle on the chest, arms, legs, and spine, must be greatly injurious. The lungs, from which the fire of the system is maintained by the purification of the blood, and through whose agency heat and life are upheld, cannot perform their duty so well in a workshop or counting-house, as in the forest, in the mine, or on the mountain, over whose brow the deer are clattering with the speed of the floating mist. There can be no doubt but that we pay severe penalties: for our knowledge, or rather money-making selfishness, robs us of those civilized benefits which that knowledge could so easily bring into practical operation. We have mentally advanced, we have physically receded. The growth, the health, the longevity of man, all of which ought to be increased, are, comparatively speaking, diminished. In no tribe of North American Indians will you see the crooked, pale-faced, scrofulous, consumptive ghosts, that seem to haunt present society like its shadow, and follow it as close as effect does a cause. The factory, the mine, the counting-house, the warehouse, and sewing-room, are all mines of disease, sunk into the healthy body of society: from which its force, vigour, beauty, and longevity, are being gradually abstracted. Not only is the body of man stunted in growth, but the mind is overbent until it breaks—as witness our madhouses—the extent of which exceed by far the most magnificent edifices of manufacturing industry. We have only to examine society for a moment, and we will find that civilisation, such as it is, has no tendency to improve the human race, either physically or morally, although it may do it mentally, and in a pecuniary and domestic sense, as far as increased facilities, convenience, and comforts are supplied. We contend that the race ought, under a civilised system, to have become stronger instead of weaker—more stately, instead of more dwarfish, and to have exhibited the comparative superiority of the fruit of the cultivated apple over that of the wild crab.

OVER-WORK.

ITS PHYSICAL EFFECTS.

We have still a few passing remarks to make on the over-work of children, before proceeding to that of adults.

No man would think of working a colt, or running a pup hound with the pack. To place a burthen on the one, or force an unnatural duty on the other before their muscles were formed and their senses matured to the task, would be downright madness: the man would be an idiot who did it, and we would not be slow with acts of parliament to punish the monster.

Why is this? because we watch nature, and we find that she does not give wings to the bird, talons to the eagle, teeth to the tiger, muscle to the horse, or scent to the dog before she has prepared the body of each to endure the hardship of their several pursuits. We do not find the slave-driver of the East or the West Indies ever accused of driving children into the field to labour. Why? because he knows if he overworked the child, it would be stunted in growth, and he would lose the more valuable labour of the grown man.

ADULT LABOUR.

To show you that the evil of long hours is not confined to children alone I will direct your attention to the worker of the frame, the spinner. Let any man watch the incessant labour of the spinner, sometimes a woman! Good God! sometimes a woman! Watch him or her at their frame, and you see a pale, sallow complexioned being, half-naked, amidst the stifling heat and perspiring with muscular exertion, following the machine in its movements, and sliding along the floor as the frame returns to the fixture. Mark the places where his or her arm is fixed, and as the machine recedes, watch the powerful strain of the muscles of the arm to prevent the frame striking the fixture too forcibly; watch also where the foot slides on the floor, and you will see a large hole worn into the boards or the hard stone by the repeated action of the foot. No sooner has one-half of the machine receded, than they turn round to the other half, and for twelve hours they pursue this incessant labour without resting one moment, except when the mules are doffing, and then they assist in the operation.

Look at the labour of the spinner, man or woman; look at the appearance of the man or woman and ask their age. If you find one above forty in a mill you may set it down as singular. Look at the toil and then try to recollect what comparison you can make. What other labour is so constant and severe? Mowing perhaps, and that is not driven by a machine. The mower drives his scythe, whilst the spinner must follow the working of the spinning frame. Again, does a mower continue his occupation for twelve hours, without pause, or rest, or refreshment? No; he could not. Does he continue it all the year round? No; because no mortal power could enable him to bear it. So it is with the spinner; the only astonishment is how he can endure, and in fact he cannot for many years. Few, if any, reach forty, and, long before that period of life the frame is worn out and helpless as the man at three score and ten. A collier has severe labour, but how long does he work at his laborious occupation, and amidst his unhealthy atmosphere? Eight hours. When his long hours of labour are brought to a close, the wearied man returns home to seek refuge in listless sleep, or borrow a momentary excitement and vigour from spirituous liquors! He cannot sit down to the study of philosophy, to the consideration of politics, or to the enjoyments of a social debate. The wearied body refuses, unless unduly excited, to listen to any other additional labour, and probably has no other occupation, but complaint—no other refuge but suffering. Disease may commence its gnawings as soon as the labour has ceased its torture. As we find numerous nervous maladies amongst the young, so we find repeated diseases of the structure amongst the adults; diseased lungs, diseased livers, and diseased stomachs, all springing from excessive endurance of labour. We have a vast body of men exposed to the most fatal diseases of the human body, not possessing the least relaxation from the cause of mortality amongst them. The mind has no leisure for study the body no chance of repose. If the one forgets its sluggish apathy, and the other the miseries it bears, we must have an unhealthy excitement produced to raise the drunkard above the sense of suffering, or the fear of poverty. We have thus fatal diseases arising amongst the factory adults, and sweeping away a proportion of the people by various forms of suffering and decay, greater, more severe, and more frequent than we can find it to be amongst any other class of men. We have moral evils increased, wide spreading vices festering and kept open by the constant ap-

plication of the exciting cause—unintermitting labour. And we have a great body of the adult population of this nation laid mentally and physically prostrate, giving rise to national evils of the most alarming magnitude.

I know of no national pestilence, of no acquired vice of opium eating and drunkenness which could produce such mental imbecility, and such physical ruin as overworking either children or adults, because the former evils would receive a check from the hand of nature, or the laws of man, but in the instance of factory labour, both are useless and unavailing, and the evil assails a whole people. Nature, it is true, cries aloud and points to the crooked victim, the consumptive skeleton, and to the emaciated workman. Nature cries aloud and in despair, whilst her children, hurried to an early, and in too many instances, a lingering and tormenting death.

SCIENTIFIC TERMS.

Cosmogony . .	Study of the	Creation of the earth.
Astronomy . .	,, ,,	Stars, planets, systems.
Geology . . .	,, ,,	Composition of the earth.
Mineralogy . .	,, ,,	Metals, stones, earths.
Botany . . .	,, ,,	Vegetables, 80,000 kinds.
Zoology . .	,, ,,	Animals, 100,000 kinds.
Natural Philosophy	,, ,,	Properties of bodies.
Chemistry . .	,, ,,	Their composition and decomposition.
Anatomy . .	,, ,,	Structure of the human body.
Comparative Ditto	,, ,,	Structure of animals, as compared with that of man.
Hygiene . . .	,, ,,	Art of preventing disease.
Medicine . .	,, ,,	Art of curing disease.
Surgery . .	,, ,,	Art of operating on the human body.
Geometry . .	,, ,,	Art of measuring the earth.
Geography . .	,, ,,	Earth's surface, and of the races that dwell upon it.
History . .	,, ,,	Record of facts.

SWALLOWING PINS AND FISH BONES.

The swallowing of pins has often been the cause of many grievous and fatal effects, for upon dissecting patients, who have appeared, from the symptoms, to have died of the iliac-passion, or colic, they have been found to have been killed by pins. In April, 1777, a young woman, who had swallowed a very large pin, which stuck fast in that part of the gullet, which enters the chest, was brought to the hospital, at Bamborough Castle, Northumberland. As I there had the honour of the principal management of that hospital, I was sent for, and found the patient in very great pain. Having some time before considered the nature of this accident, and concluded that if anything could be given that would pass easily, and when in the stomach, coagulate it into a glairy mass, it might probably bring up whatever was lodged in the passage, I immediately gave her four grains of tartar emetic, dissolved in warm water, and then made her swallow the white of six eggs, and in about three minutes she brought up the coagulated mass, with the pin, and was effectually relieved. The same method was attended with similar success, in an instance nearly resembling the above. A maid servant to the Hon. Mr. Baillie, of Millerstain, in Scotland, went to bed with twenty-four pins in her mouth, the consequence of which was that in the night, the family were alarmed with her cries. Mr. Baillie ordered her an emetic, and the whites of eggs, as above, and the whole number of pins came up, and are now preserved in the family as a curiosity. W. Turnbull, M.D.

CHINESE ART OF PRESERVING HEALTH.

Be virtuous, govern your passions, restrain your appetites, avoid excess and high seasoned food, eat slowly, and chew your food well. Do not eat to satiety. In winter time, a glass or two of wine is an excellent preservative against unwholesome air. Make a hearty meal about noon, and eat plain meats only. Avoid salted meats. Those who eat them often, have pale complexion, small pulse, and are full of corrupted humours. Sup betimes, and sparingly; let your meat be neither too little, nor too much done. Sleep not until two hours after eating. Begin your meals with a little tea. Wash your mouth with a cup of it afterwards. The most important advice I can give for maintaining the temperament of the body, is to be moderate in the use of the pleasures of the senses. All excess weakens the spirits. Walk not too long at once. Stand not for hours in one posture, nor lie longer than necessary. In winter, keep not yourself too hot, nor in summer too cold. Immediately after you awake, rub your breast over the heart with the palm of your hand. Avoid a stream of wind as you would an arrow. Coming out of a warm bath, or after hard labour, do not expose yourself to cold. If in Spring, there be two or three hot days, be not in any haste to put off your winter clothes. It is unwholesome to fan yourself during perspiration. Wash your mouth with tea or lukewarm water before going to bed. When you lie down, banish all thought.

RECEIPTS.

HICCOUGH.

Four drops of oil of cinnamon on a lump of sugar held in the mouth until dissolved.

RICKETS.

Phosphate of soda, half a drachm; infusion of Columba, three drachms; spirits of carraway seeds and syrup of orange peel, of each half a drachm; make into a draught; take night and morning.

GODFREY'S CORDIAL.

People may now convince themselves as to this dangerous prescription for children:—Solid opium, half an ounce; oil of sarsaphor, two drachms; spirits of wine, two pounds and a half; pure water (the safest) one pound.

A DOCTOR'S POCKET TURNED INTO A LOTTERY.

Triller talks of a quack of his acquaintance, who used to go about with his pockets full of prescriptions, and tell his patients to put their hands in, and that the prescription they took out, would be sure to be the best for their complaint. A lady, with an abscess in her throat, was advised to consult this ninny, who told her to put her hand in his pocket, and take out anything she liked, and it would be sure to do her good.

After fumbling for a time in the impostor's pocket, the lady drew out a prescription, and found the remedy prescribed of so comical a kind, that she burst out a laughing, and in doing so, burst her abscess and recovered.

CONSUMPTION.

This is a disease with which all families are more or less acquainted; and we therefore feel it to be our duty to occupy a considerable space for its consideration.

Causes.—There can be no doubt that many thousands are born with the seeds of this terrible disease lurking in the frame, and waiting some unfavourable exposure to cold, wet, or want, to act as the signal for the appearance of its insidious symptoms. Now, it must be evident that, where the disease is constitutional, the error committed lay in the marriage; one or the other, or, mayhap, both of the parents had the disease in their families—or a marriage took place between first cousins, an event calculated to make the offspring weak and consumptive; all intermarriages between near relatives should be avoided; but interest, money, and family reasons, prevail oftimes over the safety and security of society; to serve the ambition of the day, or the pride of an hour, future generations have entailed upon them incalculable sufferings. Let people then, who are of a consumptive tendency beware! Let them look down the vista of years, and contemplate flower after flower, cropped in the very bud of existence by the stern scythe of death. Nature seems to mark out the consumptive victim with startling exactitude. We have generally the fair soft hair, the delicate transparent skin, with its blue wandering veins, the sanguineous temperament, the tall slender figure, the narrow chest, the flabby muscle, the swan-like neck, and the long tapering fingers. With a caprice, too, that is remarkable, we have the strong-built frame at times, the dark full eye and the long flowing dark hair, forming another picture with the same soft hair and skin of the fair victim. Then we have beauty in its extremity, intelligence at its highest elevation, combined to excite our admiration and applause. Yet, although nature seems to accumulate treasures to make their loss more afflicting, the lesson seems thrown away upon man in his present state. Interest, fortune, rank, and class, all combine to form marriages of convenience or gain, but not of love; and the future generation must pay the penalty which ignorance and avarice have secured to them as their lot. Well may it be said that the sins of our fathers are visited even upon the third and fourth generations. Injudicious, nay, sinful marriages, I point out as one of the first great causes, if not the primary cause of consumption. A race are formed only to perish between 18 and 30 of consumption, sometimes earlier, sometimes later in life. The next cause may be called the climate cause. Some countries and races of men being less liable to it than others. Russia is not, in a proportionate degree, so much afflicted with the complaint as England—but we fancy that the variations of our climate account for that. Wherever there is alternate heat and cold with moisture, the weak lungs are sure to be affected. Now, in Russia the climate is steadily cold; and that, from the evidence of our exploring expedition to the North Pole, is not, even at its extremity, at all injurious to the lungs: on the other hand

when the climate is steadily warm, or even broiling hot, the proportion of consumptive cases is diminished when compared with a country having a variable climate. This fact seems so well established that I need hardly dwell any longer upon it. The next point to which I shall direct attention is

OCCUPATION.

Whatever class of men may be employed at any trade where dust, powders, or flakes *of a hard substance, not capable of being easily dissolved or digested*, fly about, then, however strong the constitution, and however little tainted by consumption, that disease is certain to strike the majority down before forty years of age. Take a needle-pointer, and we will find that his average span of existence extends to forty years. I have seen one above forty, and at his work; but I speak now of averages; and their sick, benefit, and burial societies know that well. That the dust of the steel flying into the lungs, causes death, may be at once comprehended by comparing needle-pointers with millers: the former breathe metal most minutely powdered — the latter breathe flour equally divided—the one is indissoluble in the lungs or stomach—the latter can be speedily dissolved; the workman in one instance lives only until forty—the workman in the other case lives until a ripe old age, when he is gathered to his fathers like a shock that is full and ready to fall. It will hardly be credited that the needle-pointers will not wear a magnetic mask, which would attract all the steel particles when floating into the mouth or nose. If they will not soon, then may genius displace them by machinery, for it would be a merciful godsend. Cutters of grindstones and stone-cutters generally, are extremely liable to this disease. Miners, too, from damp, and breathing carbonic and hydrogen gases mixed with atmospherical air, are often seized with consumption. Joiners and carpenters who work hard woods, but especially mahogany and certain other foreign woods, are very liable to affections of the lungs ending in consumption, caused undoubtedly by the dust and smell of the wood itself. Tailors, glovers, carders, shoemakers, weavers, spinners, carpet-makers, &c., are all attacked with consumption, from the dust flying about as well as the close-confined atmosphere of the rooms in which they are employed. The casters of brass-work are more afflicted with the complaint than most other Birmingham artizans. If we compare London, which is a healthy city, and where the manufacturing branches of industry, such as we find at Birmingham, are of scarcely any importance in the calculation, we will find that out of the same number of persons 494 out of 1000 die of consumption in Birmingham, whilst only 402 die in London of that complaint. This is a staggering proof of employment having much to do with the creation of consumption as it has much to do in preventing it. I knew a cousin of mine who became a sailor, and from his cough and continued spitting, every one thought it would kill him; but on the other hand although the rarity of the sea air caused a rupture of a bloodvessel, he has since recovered so

completely that, to look at his robust frame and ruddy complexion, one would never have guessed he had been a weakly consumptive child. Butchers are entirely exempt from this disease because of the animal food they handle and eat, which brings me to the consideration of a cause, which, in present society, is most prolific of consumptive patients. I mean *starvation*, the want of proper food, clothing, and lodging. When a poor creature is deprived of these necessary means of existence, the body becomes emaciated, and the lungs are sure to be affected. The skin is kept cold, the feet wet, and, above all, the stomach empty; seldom do they get a bone to gnaw, whose fragments of flesh and marrow would light up again the torch of life, and stimulate body and mind to vigorous action. When we see the miserable, with haggard eye, pinched-up countenance, and emaciated frame, then consumption will most assuredly pay a visit and commit its ravages at leisure. This consumption is a *galloppping one*. The cause of original mischief, in frames strong as Hercules, is the want of animal food, of blood for the frame, of that living fire and vigour which plenty conveys into the veins, and distributes throughout the nerves and sinews of the frame. In hot countries the poorest of the poor are protected from the climate. In Russia the skins of wild beasts, and the flesh of animals killed in the chase avert a similar calamity: but in England, Scotland, and Ireland, it is different: we have no burning sun, or prowling beasts; the variations of climate do their worst on the houseless wanderer and breadless pilgrim, through the dark valley of suffering, want, and misery. No one has even calculated: few imagine for a moment the dreadful ravages produced, the diseases generated, the fevers spread on every hand, or the tremendous number of consumptive cases caused by destitution. There are only three inlets to the grave—when man is brought to the last crust of bread, and driven from his last shelter into the storm and rain to live as he may. It is either fever, consumption, or insanity and suicide. Want, we designate thee as one of the fellest, foulest, causes of consumption, and a fit companion for your brother causes of the deceitful, lamentable, and deplorable scourge. We shall, on account of space, postpone the consideration of symptoms, treatment, &c.

DIALOGUE WITH THE GOUT.

Gout.—So, Alderman Tunny, notwithstanding my many kind and pointed hints, you did go to the Lord Mayor's last entertainment; and, as usual, allowed your stomach to take the reins into its own hands; well, do you expect me to stand this any longer? You promised to pay everything due to me, on my last call, you promised to discharge in full all the debts you owe to nature. Now, sir—?

Tunny.—I beg pardon: I said I would do so to the utmost of my ability. The liabilities were great—oh! oh! oh! why did you bite my toe in that way?

Gout.—To teach you better manners. Why did you interrupt me when I

was studying your interests, sir? You promise indeed. There is not one single asset of firmness in your house, Tunny. I would not give a lobster's empty claw for all your promises. I won't trust you any longer. I must come to a settlement, and there, I serve an execution upon you. I take possession, sir.

Tunny.—Oh dear! Oh dear! Oh! oh! oh!—Do let me have a respite? I will promise anything, swear, or foreswear anything you please.

Gout.—I dare say you would, Tunny; but your credit is gone, and your constitution will soon follow it. I should lose everything if I did not put in my bailiffs of torture and pain. There is no time to be lost, and I must make up for the delay.

Tunny.—Oh, Lord! this horrible torture—

Gout.—Did I not send you a letter by Mr. Attorney Twinge, after that private guzzle you had in your own house—the snug party as you called it? Why, you—in spite of the claims I had upon your goods and chattels—you ordered turtle, turbot, turkey, roast-beef, and champagne in ice; I could not avoid seeing such extravagance, giving you a hint there were such persons as Gout and Co. figuring at the head of the list of creditors, versus Tunny, Constitution, and Company.

Tunny.—My dear fellow, I merely drew a bill—

Gout.—And I took it up, sir; so take the small change out of it.

Tunny—Merciful heavens! did ever any poor wretch endure as I do? Oh, dear! Is there no poor devil I could hire to carry this load for me?

Gout.—Not one, Tunny. Do you want any more of it?

Tunny.—For heaven's sake, and for the love of God forbear.

Gout.—Well, I don't mind if I have a quiet chat with you. Oh, don't trouble yourself about that flannel and foot-rest. It is of no use.

Tunny.—But I say it is. I can turn you out if my old friend Colchicum only knew of my disaster.

Gout.—It is of no use, Tunny; you may draw short bills upon him, but I will beat him in the long run. I tell you I will not give up possession to such a fellow. I should not mind about milk, sago, arrow-root, &c.; I would honour their bills at sight; but, depend upon it, turtle, turkey, and lamb the younger, are rotten fellows, and I will only light their bills and burn your toe with them. There is one I had from sangaree and curry, and another from lobster and oyster-sauce. There how do you like their returns?

Tunny.—Pincers—hot irons—vices—and all that's damnable—oh! oh! oh!

Gout.—I thought as much, Tunny; now let us converse in a friendly manner; answer me. Did you respect the writ I served upon you after Sir Henry Pottinger's entertainment? Did you not light your cigar with it over your brandy?

Tunny.—I did, wretch that I was; but I thought it was all fudge.

Gout.—What! you did, did you; although my messenger Sting actually kissed your toe when he presented it?

Tunny.—True, unfortunately true; but the brandy was really so palatable after the devilled turkey that I—

Gout.—Thought I was not in earnest; well, you have found out your mistake—devilled turkey, eh? Was it as hot as this?

Tunny.—Oh! oh! horrible—

Gout.—Now be quiet, will you, with your howlings. When do you get up, or have risen these many years back?

Tunny.—About ten o'clock.

Gout.—Take that.

Tunny.—Oh, dear me, martyr that I am.

Gout.—Well, what do you get for breakfast?

Tunny.—On my honour, very little; only a chop or steak, some eggs, kidneys fried in champagne.

Gout.—There's some of the real sort for you.

Tunny.—I shall go distracted; why, you have transfixed my toe. Help, help! send for the doctor.

Gout.—Will you? Wait until I have finished my interrogatory. Well, what do you do after breakfast?

Tunny—Why I have nothing to do now—sit on the bench sometimes; read the morning papers and take an airing—

Gout.—On foot?

Tunny.—No; you prevented that yourself.

Gout.—It's a lie. Tell me another if you dare.

Tunny.—Infernal agony! Oh! oh! oh!

Gout.—Well, go on; and none of your grunting.

Tunny.—Well, I have lunch about two o'clock; cold fowl, a hot chop and potatoes, wine—occasionally something better, with fruit and a trifling dessert.

Gout.—A dinner, a dinner, you guzzling brute. There is a trifling admonition.

Tunny.—May perdition seize you, remorseless vagabond!

Gout.—Oh! you are coming it rather strong; but I will forbear, or you would not estimate my hints so much—go on.

Tunny.—I dine at seven; you know my ordinary courses—soup, fish, animal food, pastry, fruits, cakes, wine, and a wind-up.

Gout.—Go on; I am not in a bad humour; go on; never was so cool in your experience.

Tunny.—Why there is coffee and tea of course, and the—

Gout.—What next?

Tunny.—Supper, hot of course, with punch, cigars, and bed.

Gout.—Now, Tunny, my turn comes; you have drawn on the bank of your constitution, like a hog on a mess of potatoes and flour. You have made your stomach your God, your appetite your Saviour. You forgot there was such a thing as digestion, nature, or me. Did you get a stomach, like one of your money-bags, to fill as fast as you could, and the fuller it was the stronger your credit? No, Tunny; you have settled the stomach, upset the nerves, and ruined the constitution, producing apoplexy from too much blood, myself from the food being too stimulating for the digestive powers and the nervous system. I am the appraiser, sir, and I shall proceed to value the strength of the concern; you overgrown, guzzling sloth; you table-cloth caterpillar; you turreen maggot—Oh! don't suppose I am angry, Tunny, only we shall have such a night—Eh, what, is it possible, asleep! Fiends of torture! demons of pain! lend me all your pincers, red-hot pokers, vices, and punches. I'll arouse him with a vengeance.

Tunny.—Oh, oh, oh, oh! murder, murder, murder!

Gout.—Don't fall asleep, sir, again in my company; now are you fully awake; very well. Listen to me; it is the last bid; going, going. Rise at six o'clock; breakfast on a basin of milk and dry crust; walk out ten miles, or work in a ditch, until twelve o'clock; eat a potatoe and a small bit of animal food, rice pudding, or any other food you like, that is not stimulating. After dinner go out again to work or walking; come home; take a cup of tea. I will allow a poached egg at night, and then bed at ten o'clock; get up next morning, and repeat the dose.

Tunny.—I'll see you d——d first!

Gout.—Very well, Mr. Tunny; mind you, I do not often reason with folks, but I think I can bring them to it; I dont want to coerce people, not I, only I will have my own way. Now for a trial, Mr. Tunny.

We have not heard the result of the experiment, but we shall feel bound to report it when Mr. Gout forwards any more leaves from his note-book.

DIET.

ANIMAL ALIMENTARIES.

We begin, under this head, with the milk of the cow, goat, ass, &c. Milk, when drawn from the cow, separates itself into three parts, the oily, coagulate, and serous. The oily composes the cream, the

coagulate the curd, and the serous the whey. A stream of air, heat, or agitation, produce a more rapid separation, and the distinct parts will, of course, be more evident. A stream of air is employed in dairys, where the milk is deposited in wide basins, so as to permit the action of the atmosphere, in depositing cream upon the surface to which its oily nature will raise it. Heat, again, will affect a rapid separation by boiling, so will agitation, such as churning. In the latter case, the cream becomes more solid, until it is ultimately converted into butter. Here we may remark, that rancid butter may be almost cured by melting. Our readers are aware that the juice of the stomach causes a separation of the parts composing milk, and that the stomach of a young calf, termed the rennet, is used for that purpose. Milk itself is capable of fermentation; the Tartars preparing a spirit from mare's milk. Sugar also may be obtained from whey, by evaporation. The chief diseases in which milk is useful, as part of the diet, are consumption, gout, &c. The former complaint may be called the principal one, in which it is recommended. It is as well to know, that when vomiting ensues after its use, it had better be given up, and some thin soup, having the fat skimmed off, be used instead. Mare's and goat's milk have all been employed in this complaint, but the cow's milk is not so rich, and consequently has been found better adapted for the weak stomach. As food for children, nothing could be better, and they should have some bread and new milk the very first thing in the morning; sending them into the fields for it themselves. Weak children, above all others, have then an opportunity, by exercise, the fresh air, and new milk, of invigorating the constitutions. In gout, milk is very beneficial in the commencement of the attack, but the high living which gave rise to it, should be gradually abandoned. There are some cases, in which persons have constant vomiting. It has been found, that a diet of milk, in such cases, has completely cured the patient. There can be no doubt of the salutary influence of milk upon the coats of the stomach, if perverted by spirit-drinking, tobacco, &c. It is the first food of nature. The fluid which results from food, and which is conveyed into the veins, lungs, &c. to form blood, is exactly of that colour. People who live in a pastoral state, are not subject to the same diseases as those who have only a limited supply. All country people having pure milk, fresh air, and wholesome food, are remarkable for their ruddy robust appearance. We have no doubt that the adulteration of milk, in cities, commits many a robbery on the health of a household. It is lamentable to think that so many diseases should enter our dwellings, under the mask of enticing and familiar articles of diet: yet so it is.

Butter, as an article of diet, must be sparingly used with invalids, although it is a substance, which nature requires to fulfil the ends of digestion, and even to carry it on. We have eaten a salad, and it has not agreed with us until oil was added. Why should nature give us butter, oils, fats, &c., unless she intended us to use them in a proper manner?

Cheese, again, we consider an exceedingly wholesome nutritious diet, when neither too old nor too new. It is very good for men who have had a good dinner, and drink plenty of wine, to eat stinking cheese; but it is not the best diet for those who have to dine off cheese alone. Toasted cheese is decidedly unwholesome at supper, in the shape of a Welsh rabbit. It is very indigestible, and liable to produce nightmare—a good quantity of bread should be eaten with it; but invalids must studiously avoid it, as with healthy persons, it requires a long period for digestion, and a sharp appetite to invite it. The animal alimentaries, more properly speaking, are beef, mutton, veal, pork, &c.

Beef is decidedly the most nutritious, and the most easy of digestion. Beef soup, and toasted bread, has been found the best for invalids in small quantities, frequently repeated. The beef-tea, means merely weak beef soup skimmed, the meat having been boiled at least half an hour. Beef, we repeat, is the most easy of digestion, easier than mutton, veal, lamb, or pork. Delicate stomachs have proved that as well as experiments. Small silver balls perforated, containing beef and veal separately, were passed through the stomach of a dog; similar balls were swallowed, and then ejected from the stomach of a man. There were twenty grains in each ball—all the beef was gone, but ten grains of the veal remained undissolved by the gastric juice. There can be no question as to that; hence the common idea that veal is tender, must be abandoned. We suspect the absence of the blood in the veal must partly be the cause, the animal being bled when living repeatedly, to make its flesh white, or in other words, to take all the nourishment out of it, and leave strings of fibry muscle behind. We have always found underdone beef the quickest for digestion, the most nutritious, and the most invigorating of all food. Mutton may come after beef, then lamb, veal, and lastly pork, which is decidedly the most indigestible of all others. Pork requires to be well roasted, veal is best in the form of cutlets, lamb and mutton should always be roasted, although the latter loses nothing by being boiled. We hold that the great object and aim in preparing animal food should be to retain the juice of the meat, and that is best retained when underdone, best suited, too, in that state for delicate stomachs, more calculated to strengthen the lungs, and, but for prejudice and custom, would save many a poor invalid from the grave.

Hares and rabbits stewed, and made into soup, when fresh, are admissible for invalids, but on no account when turned. The turkey, the duck, and the hen, may also be eaten, but the young of the peacock are far more tender and nutritious. Geese, ducks, swans, &c., on the other hand, must be sparingly employed. The woodcock, snipe, &c. cannot be allowed; they are more stimulating than nutritious. Eggs of hens, turkeys, geese, &c., are very nutritious, but contain an oily matter indigestible to some people. In the raw state they are easily digested, next in the half-boiled, least and last of all when hard boiled. Amongst reptiles we have the turtle,

which is very easy of digestion; amongst serpents there is the viper, which is very nutritious, provided the head be cut off. Fishes are less nutritious than animals or reptiles. Those containing oil are the most indigestible, such as eels. Salmon, perch, pike, turbot, &c., are amongst the best for invalids. We have last of all oysters, cockles, &c.; these are decidedly most easy of digestion when eaten raw, without vinegar or pepper. The muscle is a dangerous fish to eat, and when any shell-fish have any greenness about them throw them away. Our space being exhausted we must return to such an interesting subject in our next.

TO CORRESPONDENTS.

C. R., Shadwell.—Take of powdered gamboge 6 grains, colocynth 18, aloes 24—mix; then with a little syrup make into 12 pills; take one night and morning If there is much purging, stop the pills: if not, assist the action with a wine-glassful of salts—one ounce to a pint. Accustom yourself to be regular; the nervous weakness will soon go.

Subscriber, Bristol, must have written with the end of his stick dipped in ink. See advice to T. F. M., No. VII.

A. Z. W. C., Hackney-road.—We do not think the symptoms belong to the cause he states: mercury might produce similar ones. Open the bowels, have a run down to Brighton, and jump into the sea. Be temperate.

Constant Reader.—Thornbury could not answer the question as to the disease of the lungs positively without seeing her; but it seems only sympathetic, and the evil may be averted. We should certainly say go into the country, to some farm-house, and drink milk; as for food, it must be mild and nutritious. A blister would be of great advantage, as there seems to be inflammation, although if it shifted about we would not blister. Have you sponged the chest with cold water, having a tea-spoonful of muriatic acid in it? Try that, and do not be alarmed.

A Subscriber, Salford.—Super-acetate of lead half a grain, extract of colocynth three grains—make into one pill; take one each night during a week.

A. V. Z., Dublin.—We are not aware of any such practice as that to which he alludes, nor do we believe in its existence. He must have been thinking of a degree of M.D. from the German colleges. We do not approve of the system, and certainly would neither advise it nor have anything to do with it.

Humanitas, Coventry.—We would, in such a case, apply the *moxa* over the joint frequently, and use around it the Tartarized antimony ointment, to keep a constant crop of pimples out; besides that, we would attend to the bowels, but instead of purging much or weakening the system, we would support it up to the point when no inflammatory action would be produced. The disease is local, and in such cases the food requires to be nourishing but not stimulating. All these cases are bad ones, and difficult to treat, unless we saw the patient.

Constipatio.—Same pills as *C. R.* No one should accustom themselves to medicine; accustom yourself to be regular. The pills must have some other name. Never saw the work. We presume the principle is to habituate the system to do its duty regularly.

B. H., Truro.—We cannot for the life of us make out the latter part of his case, or we should most probably have answered it, although it is more fit for private correspondence.

F. Rodney must on no account purge himself so much. Who made Gregory's mixture for him? Take a table-spoonful only in the morning; quassia as usual. Amusements, exercise, and occasionally a little port wine, will set him right, unless the mind is more diseased than the body.

B. G. R. W. will find that if he habituates himself every day, at a stated hour, nature will soon set all right, and keep the bowels regular. In the meantime, take at night, twice in succession, three grains of colocynth, three of aloes, and half-a-grain of gamboge, made into one pill. Don't continue that, but take the case into his own hands, as suggested to him.

R. B., Ayr.—We fear nothing short of an operation would recover his sight.

In the meantime, we would advise him to open his bowels, and apply a few leeches round the eye, but especially on the temple. After that he may take, at bed-time, 10 grains of dovers powder, always observing that he is not costive next day.

S. A. S., Hunslet.—The complaint seems chronic inflammation of the lining membrane of the abdomen. Leeching or cupping is best, together with electuary of senna, one tea-spoonful every night and morning. A blister over the part will be advisable if the pain returns.

T. F. H.—Shower bath, no supper, light clothing, mental resolution, and abundant exercise.

N.B. Medical Advice will always be given to any person (gratuitously) through the pages of the FAMILY DOCTOR; but it is necessary to give age, sex, employment, symptoms of disease, length of its duration, together with the most probable cause, or at least to describe the commencement of the attack. Any one may have advice through the above medium—viz., *answers to correspondents*, without the necessity of giving their names, or the possibility of their being made known; only, there may be questions which we shall decline answering in our pages, in which cases the patient may correspond with the editor, receiving advice until cured, on payment of 2s. 6d., as a fee, in the outset. In all cases direct to the Editor of the FAMILY DOCTOR, 4, York Cottages, St. Mark's-road, Camberwell New-road, London.

TO OUR READERS.

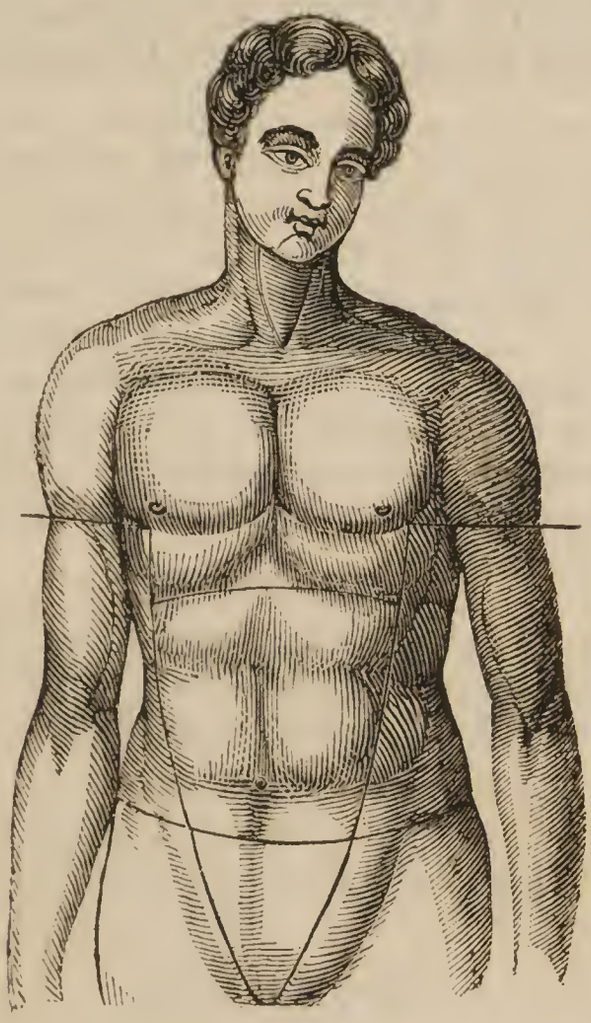
This week we have advanced the price of the publication from one penny to *three halfpence.* We have done so with the view of enabling us to procure better designs, having had much reason to complain of those we have had executed, to print on better paper, and to afford superior matter. Instead of following out the biographical sketches, we shall adopt anatomical ones, as being more instructive. We shall have longer articles, and fuller ones, on important subjects. We shall conclude the tale as quick as possible, but fear we shall not be able to continue others; as the space occupied by correspondents is more than we anticipated. If the reader is deprived of the tale, he will have more medical information; and our sketches, such as "A Dialogue with the Gout," &c., we trust will afford both instruction and amusement. We commenced on that principle, and intend going on with it; as, in our opinion, it is more attractive than dry medical details. We shall treat *the diseases of all the trades in dialogues.* All technicalities will be studiously avoided as heretofore; and knowledge, variety, and simplicity, made the chief features of the FAMILY DOCTOR. Its success has surprised our best friends; and we hope, in making an attempt, to become still more worthy of public patronage, that our readers will support us in doing that which is calculated to instruct them more than it will benefit us. The principle of the publication will be abided by, the medical portion of it enlarged, and the designs and printing improved more and more. We, therefore, in conclusion, summon our friends to our aid, and beg them to remember that many of the afflicted receive, for a mere trifle, advice which otherwise would seriously interfere with their income—advice which we are always as ready to give as the sick may be disposed to ask it from. THE EDITOR.

THE

FAMILY DOCTOR.

ILLUSTRATED.

No. 10.] AUGUST 9, 1845. [PRICE 1½*d.*



THE ABDOMEN.

WE now present the reader with the figure of the abdomen externally, with the view of pointing out its medical divisions. The reader must not, however, suppose that there is any hollow or empty space in what is called the cavity of the abdomen. There is a cavity, when all the intestines are removed, but in life there is not one atom of space unoccupied. It would be worthy of trial, for the sake of instruction, to watch a butcher opening a sheep: all the intestines are completely placed within the abdomen. In fact, they are as closely in contact as one herring is with another when packed in a barrel. We have the diaphragm, as we mentioned in our last, separating the intestines from the lungs, and rising in a bell shape within the thorax. Then we have the pelvis. But in front and on

the sides, stretching between the ribs and the pelvis, are strong muscles, forming boundaries in these directions. These muscles also contract and expand, serving important ends in respiration and digestion. They press equally all around on the contents of the abdomen. Some people imagine that there is an empty space, because wind is rumbling through the intestines. Our readers know, however, that the stomach contracts when empty, and that although the intestines may contain wind, that does not form any empty space in the abdomen itself. The sides of the abdomen are always in contact with the viscera or bowels, whether they are full or empty. In running or walking, riding on horseback, or rowing boats, the muscles covering the abdomen in front and at the sides, by contracting and expanding, produce a salutary effect upon the intestines, and accelerate the progress of anything within them, emptying the system when sluggish, by exercise alone. The lungs are in active operation purifying the blood and conveying its motion to the diaphragm; all of these movements combined strengthen the system, produce an appetite, and conduce to health and vigour. The skin, by perspiration, carries away its portion of fluid; the intestines, by pressure and relaxation, are brought to perform their duty: the system is relieved of sluggish humours, and as the useless matter is removed, the lungs draw in fresh air to refine new blood and give strength to the arm, appetite to the stomach, lightness to the body, and hilarity to the mind. The diaphragm, the muscles of the abdomen, and a general knowledge of the external and internal parts, together with their functions, are interesting and important subjects of study. In Phre-

nology, the head is mapped out for the convenience of the phrenologist, each part marking externally what is supposed to correspond with a particular portion of the brain internally: the lines are, of course, not to be found in nature. In like manner, anatomists, for their own convenience, as well as the practice of medicine and surgery, divide the abdomen into particular parts, or if we may so call them, districts. Of course this division is altogether artificial. The reason of this mapping out of the abdomen is because it is absolutely necessary, when a patient places the hand over a particular part and complains of pain, that the medical attendent should know what internal organ or organs are affected: a pain may, for instance, be felt in the left side under the ribs:—in that case we would look to the stomach. A pain may appear higher up in the right side, and shooting towards the shoulder: in such a case we would treat the patient for an affection of the liver. The reader, on reference to the design, will observe two lines running across the abdomen and two running upwards on either side, crossing the others at right angles. In this manner nine different divisions are formed—three above, three in the middle, and three below.

Let the reader suppose himself turned round and facing like the design, *then what appears to be the left, as we look at the figure, is in reality the right side!* We shall count from right to left, and from above downwards, taking each division in succession, thus :—

FIRST DIVISION.

1st space (right) Hypochondriac
2nd „ (middle) Epigastric, (over the stomach)
3rd „ (left) Hypochondriac.

SECOND DIVISION.

1st space (right) Lumbar
2nd „ (middle) Umbilical, (the navel)
3rd „ (left) Lumbar

THIRD DIVISION.

1st space (right) Iliac
2nd „ (middle) Hypogastric (below the stomach)
3rd „ (left) Iliac.

In consequence of these imaginary, but important and useful divisions, a surgeon who knows his profession can, in the event of a stab or gunshot wound (but more especially in the former case), state what parts have been wounded, adopt efficient remedies and foretel the chances of recovery. Let the reader make a little guage with four pieces of stick or wire, and apply it over the design in number 2nd of the "FAMILY DOCTOR." He will then form a pretty general idea, and as good a one as can be had without dissection, of the parts likely to be injured in each region by the thrust of the knife, bullet, &c. Of course he must remember that the left of the figure is the right of the body, and vice versa.

These divisions are also of very great importance in many diseases, as they can be detected by an external examination of the abdomen. This is of as much, sometimes more, importance than feeling the pulse; as, for instance, in a case of incipient dropsy, or enlarged liver, or subucate inflammation of the peritoneum or lining membrane of the abdomen. By tapping on the abdomen, the presence of air or water may be detected as well as the presence and seat of inflammatory diseases. It is always a bad symptom when there is much tenderness on the abdomen, and a shrinking from the touch, as if it pained the patient to be touched with a feather's weight.

There are persons with abdomens like tuns, with whom you can do nothing. The fat in these cases collects over the muscles, between them and the skin; and as for tapping, you may as well apply your fingers to a woolsack for all the information you are likely to receive. Still, however, the external covering of the abdomen, being soft and pliable, diseases of the intestines, liver, stomach, &c., may be detected through the lining of the muscle, fat and skin. Hippocrates said, "Certain it is that he who examines the abdomen as well as the pulse, is much less likely to be deceived than he who does not." And a distinguished modern, Baglivi, has confirmed this observation of Hippocrates in the following words:—"If physicians were always to examine the abdomen, upon first visiting the patient, more particularly in acute diseases, they would assuredly commit much fewer mistakes than they do."

1st. The abdomen may be affected with spasm, as in colic, or with inflammation, as in enteritis. Different remedies are required in each case; and if one was applied through mistake to the other, death might ensue. In inflammation the abdomen is rounded and distended—whilst in colic it is drawn up or contracted. In diseases of children, the state of the abdomen is of the greatest importance.

2nd. Manual examination conveys to the hand or the touch the sense of tumours, enlargement, water, wind &c.; also increase of temperature, which always accompanies inflammation, for which the remedies must be prompt indeed when it begins in the abdomen. Coldness too shows a loss of balance in the circulation and the presence of congestion of the blood in the brain, or elsewhere. For instance, in cholera, this symptom was remarkable.

3rd. By means of percussion, in striking the abdomen to which we have alluded, as in diseases of the chest, a new field is opened up for the inquiring physician or surgeon: on the whole the study of the abdominal region is of the first importance to the medical attendant, who desires a thorough knowledge of his profession, and of the last importance to the patient who values life and health, the mother of all happiness.

TIMES OF EATING.

THERE cannot be any clear or distinct code of laws promulgated in respect to the proper times of eating. The occupations of men are so varied, and their habits so different, that the rule that would apply to one class would not answer all. We cannot, of course, find space to enumerate the various professions and trades, with the greater or less amount of labour attached to each. We can, however, give some general rules, and lay down some sound principles. We consider it absolutely necessary, that every man engaged at hard labour, requiring much physical exertion, should at the least have four meals a day, and one of them should consist of plenty of animal food. We consider, on the other hand, that people employed at a sedentary business, such as tailors, clerks, &c., do not require so much food as they need nutritive diet, simple in form, and easy of digestion. A person in good health requires food every four or five hours; but it must be observed as a general rule, that food should never be forced on the stomach. The appetite is the sole test as to when food is required, except in cases where there has been so much exertion in physical or mental energy expended as to destroy the appetite altogether. Nothing will induce such a state of body so much as writing, composing, or book-keeping. We will suppose a person to rise at six or seven o'clock in the morning. The stomach is then empty, and very susceptible of external impressions. The French generally leave their homes, and proceed to work, taking on the way a small glass of brandy, and a morsel of bread. The Scotch and Irish do the same. This is a most injurious practice, as far as the brandy is concerned; but it is a good one, in respect to the bread. The best thing for an invalid, or a person in perfect health, is to take a morsel of bread as soon as he can after getting up in the morning, *and a cup of warm coffee or tea.* This practice is the most admirable that can be adopted. A man even, although sickly and faint in the morning, can, under this system, go to his employment, business, or hard labour, continue at it until the breakfast-time, say, eight o'clock, and return home surprised at the excellent appetite he has got. He will think he has found a stray appetite, and a good one, on his road home. How many thousands go to work on an empty stomach and return listless, dragging their unwilling limbs along, faint, athirst, but not hungry.

Let them try the above plan, and they will make men of themselves, and feel strong and hearty.

We suppose breakfast at eight; and we may as well give a good hint to people with delicate stomachs, who, like ourselves, have felt the coffee to create heartburn and indigestion. Coffee made without being boiled, the water being merely poured over it, or poured in it when inclosed in a bag, is by far the most wholesome; boiling takes up the acrid aroma of the seed, and, in common language, spoils the stomach. On such coffee, say half a cupful, the same quantity of

boiled milk should be poured; and, however delicate the stomach, the combination will be found remarkably pleasant and agreeable. Dinner should be at twelve, or one at furthest; these being the most natural hours for the middle or principal meal of the day. Of course, it is different with the aristocracy, who only get up at that hour; and who will by-and-bye dine next day, or, at all events, at midnight. Tea should be taken at four, and supper at eight; leaving at least two full hours before going to bed. Rest before and after meals must above all things be practised as a general rule.

No person who values health and long health, should come bouncing in to dinner like a cat out of a shower of rain, and rush off again like a dog with a stolen joint. Every one should rest at least twenty minutes before, and half-an-hour after dinner; and do nothing save converse, laugh, or stroll about, giving digestion a fair chance of doing its duty. Let the meals be regular as clock-work; no matter what hours you accustom yourself to. Rest before and after them. Eat them slowly. Drink nothing before, and sparingly after dinner and supper. Leave table with an appetite, or a shred of it left behind; and it will be your own fault if you don't enjoy life.

PROBE.

INVALID'S CORNER.

"Amusement is conducive to the Restoration of Health."

THE POISONER.

(*Continued from Page* 127.)

"It must be admitted, sister," repeated Amelie, compelling herself to look severe, "that it is very bad to read a letter which is not addressed to you."

"But when we gathered up the paper, torn in various parts, we did not imagine it was a letter. Now I believe I have discovered a secret."

"A great secret?"

"Yes, sister. The stranger who appears so sad and resigned, is no other than——"

"Well?"

"Let us run. Here she comes."

Sister Marguerite entered, followed by a man about thirty-five or forty years of age, of ordinary stature, having small, delicate features, piercing eyes, and dressed in the elegant costume of an abbe.

"You said you wished to be alone with me," said sister Marguerite, seating herself on a bench.

"Yes, sister."

"Speak father: I listen."

"You are sure no one will disturb us. Shut, I pray you, the

wings of that lattice; for," murmured he, in a low voice, "if they heard, all would be lost."

Sister Marguerite arose, shut the window, and returned to her seat beside the abbe, who continually glanced about, to see if no secret communication existed in the walls of the Gothic arch.

"Now, father, you can speak."

"There is no danger?"

"None."

"Well, bestow upon me your whole attention. I come from Paris, and I reached Liege only last night."

Marguerite made a movement. The abbe continued :—

"I have passed through the kingdom of France; but in what position do I find it, great God! I have seen vice hidden under the mask of virtue. I have noticed, with pain, atheism springing up in the minds of the people, and corruption spreading amongst the great. Oh! sister, believe me, that noble and powerful men in the shade carry on war of extermination. The son kills the father to satisfy his ambition; the daughter poisons the mother, the brother, and all her family, to favour her illegitimate amours, and place on her brow the sign of shameful debauchery."

"Do not conclude, father!" exclaimed Sister Marguerite, precipitately starting up and grasping the abbe's arm.

"It is she," said he, aside; then, in a soft voice, he added, "How easily such things come to pass in a society like ours, where honour, probity, virtue, talent, are considered nothing, and where gold occupies the place of all. A young girl is thrown into the arms of a man she has never seen, and she is told, 'Be the wife of this man;' and this wife, to relieve herself from the guardianship of a father or husband, commits a crime."

Sister Marguerite shuddered. The abbe, attentive to her least emotions, said, in a still more tender voice, "Come, courage, sister Marguerite, courage. You have been very unfortunate:—you have suffered much, and God——"

"What do you mean," exclaimed she, alarmed. "Who told you?"

"A poor sinner, less fortunate than you, who could not expiate his crimes in a cloister."

"I do not understand you."

"She feigns not to do so," thought the abbe. "Let us pursue the same track, my dear sister," said he, in the most religious manner possible. "I only entered the convent to see you——"

"Me?"

"And to bring you a message which I could confide to no other."

"A message to me! you are doubtless deceived, father?"

"No, Madame de Brinvilliers," replied the abbe, in a grave and assured voice.

"Silence, silence," said the marchioness, trembling on hearing herself thus named by the abbe. "Speak lower, sir, you will ruin me."

"You see, madame," tranquilly continued the minister of God, "why I wish to speak without witnesses?"

"But this message, from whom could it come? They are ignonorant at Paris of my retreat: I hold correspondence with no one?"

"Read, madame;" and he handed her a letter placed between the leaves of a prayer-book.

"From St. Croix!" exclaimed she, with joy, after having scanned it over. "From St. Croix, whom I believed dead, and whose death was announced so tragically in all the journals. He still lives, then?"

"Yes, thanks be to heaven and me."

"What, father? It is to you, then, that he is indebted for liberty?"

The abbe explained that he had visited him after the commissioner Picard, and that the remedies which he alone was acquainted with, were sufficient to restore the unfortunate St. Croix to life."

"Besides, this letter, madame, will explain more."

"He is here!" quickly exclaimed the marchioness. "He wishes to see me! he awaits me! he wishes to carry me into Italy with him! but, father, I cannot quit the convent; what would my sister say?"

"Read on," continued the abbe, with perfect sang-froid.

"Heavens! I am pursued! The civil lieutenant has discovered my retreat. The council of sixty of Liege has given an order 'to arrest, in whatever place she may be found, the Marchioness de Brinvilliers, condemned by default of having——' "

She paused, let fall St. Croix's letter, and seemed ready to faint.

(*To be continued.*)

NEW REMEDY FOR HOOPING-COUGH.

In the last number of the *Dublin Journal of Medical Science*, Dr. Graves observes, on the subject of hooping-cough, that in the first stage of the disease, he recommends the application of leeches to the throat, and small doses of ipecacuanha. When the febrile symptoms subside after the second or third week, and the cough continues violent, defying all our remedies, Dr. Graves has found the following formula, which was prescribed by Dr. Beatty, productive of great benefit, and often an effectual remedy.

Compound tincture of bark, five ounces;
Tincture of Spanish flies;
Camphorated tincture of opium; of each half an ounce.

Mix into a mixture. Dose, a drachm three times a day in linseed-tea or barley-water, and after the fifth or six year the quantity may be steadily increased to four drachms.

CONSUMPTION.

SYMPTOMS.

This is such a remarkably insidious complaint, that the first symptoms, although the precursor of a terrific train, are scarcely observable. In forming an opinion of the disease, a great deal depends on the knowledge of the family, and constitution of the patient. It is important, where occupation has nothing to do with the complaint, to ascertain if any cases of consumption have occurred in the family. In such a case, a slight cold may soon assume all the symptoms of tubercles, or wasting in the lungs.

The next thing to ascertain is, whether the cough has been long continued; whether it has been more particularly marked in the morning; whether there have been any nightly perspirations; and whether there has been emaciation of the body. Another point to consider, is the age of the patient; whether between 18 and 30, that being the period during which persons are most liable to consumption. There is sometimes a spitting of blood, which in some constitutions is the first symptom of approaching consumption. With females, other inquiries must be made, regarding regularity in points, which our readers of that sex will understand. With females, spitting of blood is a frequent symptom, and there is a frothy appearance in the spittal, streaked with blood. The spittal, or matter coughed up, particularly in the morning, we have seen to be blackish, and on testing its specific gravity, we have known it to sink in vitriol, thereby showing that the substance ejected, was heavier than that liquid. The consumptive cough is short, hard, and hollow, as the old people say, resembling knocks on a coffin. A pain in the chest or side is often complained of, accompanied by shortness of breath, on climbing a hill, or going up stairs. There is, after exertion, also weariness and languor, that cannot be accounted for from the previous exertion. This debility which gradually increases, is an alarming symptom, especially when accompanied with loss of flesh, the pale pinched countenance, broad finger ends caused by the emaciation of the parts between the joints, and clear diamond-like eyes, together with the delicate transparent skin. There is also a feverish feeling at noon and night, and the urine throws down a pinkish deposit. As the disease progresses there is generally looseness of the bowels; and that with the excessive sweating, soon bring on the hectic flush on the cheek. We have also noticed a great deal of heat and clamminess in the hands. The symptoms may be mild and scarcely perceptible during months, or even years; but they may also run their full and fearful career in a few weeks or months. Pregnancy and suckling will, however, suspend the disease for a considerable period, and so will ague or insanity: of course in different constitutions the symptoms vary considerably, and are of longer and shorter duration. We might condense the general symptoms into the following:—night perspiration,

morning cough, expectoration of heavy, dark looking, or sometimes yellowish matter, great debility and languor after ordinary exertion, shortness of breath, emaciation of body, looseness of bowels, flabby muscles, long lank hair frequently falling out, the hectic flush on the cheek, and the hot clammy hand. These, when taken into consideration, along with predisposition or occupation, are very sure to designate the nature of the disease. We shall next consider the means of prevention, treatment, and cure.

MR. ABERNETHY ON INDIGESTION.

The ordinary causes of these complicated evils are as plain as A B C. It is evident that they are to be traced to the very irregular and unnatural habits which men practise. When patients apply to me, and I see that their complaints chiefly are of the nature I have been describing, I tell them that I am no physician, and I offend them stoutly when I tell them that they have their health in their own keeping. If a man were to do as Cornaro did, he would be rewarded for it by a long and happy life. Cornaro was given over by his physicians at the age of thirty-five; he saw that there was not the least chance of recovery if he continued to swallow the trash they were in the habit of giving him; and that there was no good in putting food into his stomach, if his stomach could not digest it;—what did it do there? why it played the very devil with Cornaro's bowels; "So," said he, "I dropped the plan pursued by my physician, and adopted a regimen of my own." The principal beauty of Cornaro's life, was the state of mind in which his continued temperance preserved him. He limited himself to twelve ounces of food for each day; this was of a nutritious kind, and no inducement could prevail on him to exceed it. He enjoyed the simplest food with the greatest relish, for Cornaro's appetite was rather keen and sharp, so that he used to say, when eating a dry crust of bread, "O! how delicious it is; it is so delicious that I am almost tempted to exceed my allowance!" yet he never did. He writes, between eighty and ninety, "The society of my friends is delightful, and even the company of children is amusing to me, and when not otherwise engaged, I read godly books. But the infirmities of age increasing upon me, and becoming more feeble, my friends advised me to increase my diet, which I did, to fourteen ounces. But from the time I began to increase it, I was dissatisfied with myself, and felt that it was producing mischief in my stomach, and I had not continued it long before I was obliged to return to my former allowance!" Cornaro could not however live for ever, and we find that to the time of his death he might be said to have enjoyed perfect health. He went down to the grave at the advanced age of one hundred and five, as the account is given by his niece, who was a nun at Padua.

Now, what I propose as a diet is Cornaro's diet, and it is no fan-

ciful system. The diet should always be of a moderate quantity; it should not be wholly vegetable or animal, but it should be of a nutritious kind. The diet I have taken the liberty to recommend to the public is Cornaro's, with a few conundrums of my own, as Dr. Franklin says. I do not pretend to have adhered to such a diet as Cornaro did. Oh, no! I acknowledge myself to have been a sinner; and I remember once having been living irregularly, and having taken butter, and sauces, and sweetmeats, and indulging a pampered appetite, things that turned acid and rancid on my stomach. I was seized with pain in my bowels, and head-ache, and had a sore throat; and I had a friend of mine, a physician, to look into my throat, and there was a long discussion as to what sort of complaint it was to be—one said one thing, and the second another; but I smiled and said, "If you do not know what it is, I know what will cure it;" so I took a dose of *calomel and jalap*, I lived upon *toast and water* for about ten days, and I got rid of my sore throat and fever altogether. It is of great importance that the functions of the alimentary canal should be regularly performed, and the quality of the secretions and excretions alluded to as well as the quantity. Every old woman knows how necessary it is to attend to this, if she wish to keep herself in a comfortable state of health, and therefore she mixes up some gentle laxative compound, such as a little senna tea with some manna, or perhaps with a little tincture of rhubarb; and she takes sufficient of this to act at a given time, and if it should fail of its usual effect, why she adds a little more to the dose, or takes a similar quantity of it in four hours, and thus the end is answered perfectly well. All men should particularly attend to this subject, especially those who have sedentary occupations, or who are advancing in years.

DIALOGUE.

ON THE EXCESSIVE LABOUR OF FEMALES.

"Well, my girl, what is the matter with you?" said I, to a young woman of a most delicate appearance, whose sunken eye, bloodless lips, and emaciated frame, testified the presence of serious constitutional distress. "What is your trade? and what do you complain of?"

"I work in a factory, sir; I am a weaver, about 24 years of age, and I feel a general breaking down of my strength."

"When did you go to the factory?"

"I went about ten, sir, as a piecer at first, but I am now tending two power-looms."

"You did not find it very laborious at first, I presume?"

"Oh dear, no, sir; I liked it very much. I thought it was easy work, and the rooms were nice and warm, besides there was plenty of company to make it a pastime for a while. I felt always light-hearted going and coming; and on play-days, the woods and the hill-sides seemed like paradise. Oh! it was pleasant, sir, to wander over the knolls and gather flowers, or to play as we girls used to do in the long summer nights after the engine stopped."

"And how do you feel now?"

"Ah! sir, those days are gone for ever. I felt my strength give way first in the morning. I was not revived by the morning air, nor did I feel so sprightly or light-hearted; I felt inclined to linger in bed after the bell rung, and mother had to call me twice before I got up. I was not refreshed at all sir, by sleep. Then I had no stomach for breakfast; I sickened at the sight of it, and but for the little appetite I recovered at the dinner-hour I don't know how I should have stood it. I often felt my back weak and my limbs tired. I was ready to faint in the area, for we have no seats, sir. Then the attention I had to pay to my work has often dimmed my eyes, and the wind got above my stomach, and fairly stupified me; I thought I should have gone distracted, there was such a weight over the stomach, giddiness, and dimness of sight."

"Go on; it is important to hear such symtoms clearly described in your own way."

"Well, sir, I used to recover in the dinner-hour, but my appetite was very delicate. I did not seem to want animal food, although I thought it would be more strengthening. I took pie or stewed potatoes in preference, with a little tart in season."

"How did you feel after dinner?"

"Better than in the morning, sir; my body was strengthened, but I was soon seized with a sense of fullness in the stomach, and had heart-burn at times as well as headache, and generally I was a little feverish, although heavy-like and drowsy; I could feel, as it were, the food in my stomach, and it was like a weight on it. I could not do my work so well."

"I fancy you would have been better had you had another half-hour allowed you?"

"Yes, sir; I could have done my work better, and easier for myself."

"Proceed with your statement."

"My food, sir, as I stated, did not seem to agree with me, but the tea relieved me wonderfully; and after tea time to the closing of the mill I felt far more lively."

"That seems singular."

"It is true, sir; I was more lively; but I only picked my supper like a bird at some crumbs."

"Were you tired, and anxious to sleep?"

"Why, sir, I felt more than tired; I was so tired I could not sleep; and if I took anything heavy, like cheese or such like, I could not sleep. I kept tossing about all night, and only dosed away the hours."

"Exactly; I understand that; these symptoms did not appear all at once?"

"Oh! dear no, sir. Bless you! they have been coming on many a long day; they have been like consumption, sir. Other folks saw them sooner than I felt them."

"What made you give up work?"

"I could not follow it any longer, sir; my legs began to swell, and I am afraid I shall have dropsy, sir; my stomach is quite gone, and I have no strength for anything. I cough and spit a good deal, and perspire much in the night-time; I tried the sea-side, but I got worse."

"I do not doubt that the air was too keen and heavy. Show me your tongue—what! you have lost most of your teeth, and you are only a young woman!"

"Ah! indeed, sir, you may well say so; but my teeth all decayed away one after the other; my hair even got thinner, and I am now, God help me! as weak and useless as many old folks." A tear here glistened in the eye of the young woman at the recollection of her departed attractions—for delicately beautiful she must have been.

"It is indeed, poor girl! most pitiable to see one so young, bearing so many evidences of the decay of life, which should only have been seen in far distant years."

"Can you do nothing for me, doctor? Cannot you restore me at least some portion of health; it is hard to die so young, and bid adieu to life, when one is but entering on its pleasures?"

"I fear you began with its care first, and the canker has eaten too deeply into the bud to be eradicated."

"Do not say so, doctor."

"I must, my good girl, give utterance to my conscientious opinions; I can only give you general directions, and leave it to Nature to rally your shattered constitution, the country air, the life of a farm-steading, and the open air will do you more service than all the physic in the universe. I will convince you of that, because I can trace every symptom to your occupation. Overwork is the cause of your destruction, and will be the cause of that of thousands. I am not here carping at factory labour, or machinery, or long hours, for a political end, or for the sake of producing a commotion amongst you; I speak and reason as a medical friend, and perhaps it is the argument which, above all others, will excite less bitterness."

"I believe you, sir."

"Political animosities have prevented shorter hours of labour, but in proportion as these parties cease, so will the claims of humanity be better heard; all masters must work shorter hours, and the time will soon come when all will do so for their own interest and character."

"I hope, for the sake of thousands, that it may be so, if it is true, as you say, that overwork has ruined my health. The work, sir, is not heavy."

"Precisely so; we judge all labour by the horse standard—that is the deception. The rattle of machinery, the presence of crowds of companions, friends, and neighbours, and the apparently light labour, all bring about this misconception. The evil in your case arises from the innumerable little things to be done, the constant fingering, and straining of eye, as well as the rivetted attention. These trifles accumulate, and each of them is like a drop of water on a stone, it wears away health and strength by degrees. It is the gradual progress of this evil which deceives and deceives, until the stamina of the constitution of the most robust gives way."

"It was precisely my case, sir."

"I know it. Disease stole on insidiously and overtook you before you dreamed of its pursuit. You arose in the morning unrefreshed after the previous day's exhaustion, and hurried from a confined bedroom?"

"Yes, sir, we had three beds in the same room."

"And when Nature required the invigorating breeze, the refreshment of the morning air, you dived into a still closer and more stifling atmosphere, loaded with the vapours arising from cotton goods, the smell of oil and floating fibres. What effect could be produced but exhaustion and loss of appetite, a feeling of weariness and weakness?"

"It was so, sir, latterly."

"No doubt the body would under Nature's merciful care rally towards the dinner-hour; but then it was a race home, a rapid meal, and a race back to work. Is it not the case?"

"Exactly, sir, you might have worked in a mill yourself."

"That is not the way to maintain health. You have known men trained to run, you have heard of horses trained also, but you never knew of either being put to a race after a meal. Post-horses have to run at a moment's notice, but how long do they live, compared with the carriage horse, which feeds, then rests, and afterwards performs its task? It is strange we should be able to detect evil in regard to the feeding and training of animals, and yet never go a step in the application of sound philosophy beyond the brute creation. Hounds are never fed before a hunt, and yet man eats and runs to business and labour with the most reckless obstinacy. This disregard of all rule in diet produces indigestion; the stomach becomes diseased, the liver follows the example, the heart becomes feebler in action as the vigour of body declines, and hence, swelled ankles through pure weakness, loss of teeth from the deranged functions of the digestive organs; then come the sallow look, the tickling deep-seated cough, emaciation of frame, nightly perspirations, hectic fever, and death, which closes the scene, flickering like a dying taper, ere an eternal shadow fall upon the sufferer."

"There is no hope for me, then, doctor? Oh! it is hard to feel one's condemnation so young in life."

"I have pointed out to you what my experience alone suggests, It is the life, but not just yet, the work of the farmstead; and well indeed, poor girl, may you mourn over an evil which belongs to our present society, and springs more from necessity than intention. Let us hope it may be remedied: and that in future times our nation can pursue its mighty career without having its glories tarnished by the sufferings of the young, the beautiful, and the useful, who are hurried to the grave through a long avenue of miseries, and who sink in the early days of their journey through life, exhibiting amidst the blossoms of youth, the weakness and failings of a ripe and matured old age.

ANECDOTES.

PROOF OF INSANITY.

In a late cause, at Derby Assizes, respecting the validity of a will, evidence was adduced to prove the testator (an apothecary's wife) a lunatic; and among many other things, it was deposed, "that she had swept away a quantity of pots, phials, lotions, potions, pills, boluses, and glyster pipes, into the street as rubbish." "I doubt," said the learned judge, "whether sweeping physic into the street, be any proof of insanity." "True, my lord," replied the counsel; "but sweeping the pots and glyster-pipes away certainly was."

A SURGEON DROWNED IN HIS MEDICINE CHEST.

A surgeon aboard a ship of war used to prescribe salt water for his patients in all disorders. Having sailed one evening, on a party of pleasure he happened, by some mischance, to be drowned. The captain, who had not heard of the disaster, asked one of the tars, next day, if he had heard anything of the doctor? "Yes," answered Jack, after a turn of his quid, "he was drowned last night in his medicine chest."

CHEMICAL DANGERS.

A PROFESSOR of a northern university, who was as remarkable for his felicity in experimenting, as Rouelle could be for his failures, was once repeating an experiment with some combustible substances, when the mixture exploded, and the phial, which he held in his hand, blew into a hundred pieces. "Gentlemen," said the doctor to his pupils, with the most unaffected gravity, "I have made this experiment often with the very same phial, and never knew it to break in my hands before." The simplicity of this rather superfluous assurance produced a general laugh, in which the learned professor, who instantly discovered the cause of it, joined most heartily.

DR. FOTHERGILL AND THE APOTHECARY.

A QUAKER APOTHECARY meeting Dr. Fothergill, thus accosted him:—"Friend Fothergill, I intend dining with thee to-day." "I shall be glad to see thee," answered the doctor, "but pray, friend, hast thou not some joke?" "No joke, indeed," rejoined the apothecary, "but a very serious matter. Thou hast attended friend Ephriam these three days, and ordered him no medicine. I cannot, at this rate, live in my own house, and must live in thine." The doctor took the hint, and prescribed handsomely for the benefit of his friend Ephriam, and his friend Leech, the apothecary.

USEFUL RECEIPTS,

FOR INDIGESTION AND TORPIDITY OF THE LIVER.

Abernethy's famous remedy for this complaint is, take of the blue pill one drachm, divide into twelve pills. One to be taken every night. Take also of infusion of cascarilla bark, which is made by pouring boiling water on a certain quantity of the bark, three ounces, carbonate of soda ten grains. To be taken twice a day.

COLCHICUM WINE.

Two ounces of the seeds of colchicum, six ounces white wine; mix, and let them remain eight days, shaking occasionally. One drachm of this wine is sufficient for six ounces of water, and one table-spoonful of the mixture sufficient for a dose. It is very much used in gout and rheumatism, and very effectual, although those are best off who do not require its assistance.

EMBROCATION FOR SPRAINS AND BRUISES.

Take of compound liniment of camphor an ounce and a half, tincture of opium half an ounce—mix. This is a very useful application for old sprains and bruises, and for rheumatic pains. Warmed and rubbed over the surface of the abdomen, it is of much service in allaying the pain of colic unattended by inflammation.

COURT PLAISTER.

Isinglass four drachms, tincture of Benzoin one ounce, boiling water four ounces—dissolve, and spread, when ready, on fine linen.

EXTENT AND POPULATION OF THE GLOBE.[3]

	Square Miles.	Population.
Europe	2,793,000	227,700,000
Asia	12,118,000	390,000,000
Africa	8,500,000	60,000,000
America	11,146,000	39,000,000
Islands	3,100,000	20,300,000
Land	37,657,000	737,000,000
Sea	110,849,000	
	148,506,000	

TO CORRESPONDENTS.

Bristolian must abandon spirituous liquors, and give up reading at meals; read our article on times of eating at his leisure. Take twice a week, at bedtime, a couple of colocynth pills and a wine-glassful of infusion of cascarilla bark, and as much carbonate of soda as will cover a sixpence, every morning.

Poor Dan had better lay aside the pipe, and keep his bowels open. Take a wine-glassful of infusion of quassia, and about a table-spoonful of sherry wine, every day at noon. Rhubarb pill will answer him well, two for a dose.

Constant Sufferer, Newcastle-on-Tyne.—The disease is epilepsy, and we advise him to take 20 grains of the carbonate of iron, twice a day. He must have his bowels freely opened first, and kept regular. Some olive oil should be poured into the ear at night, and a syringe used after three or four days interval. Has he ever had any injury done to the hand?

J. P. Huddersfield.—Use some pomatum and hard brush for the hair. Four grains of extract of colocynth, and four of aloes, made into a pill and taken occasionally, will be of benefit; a seidlitz powder in the morning to assist the action, care in diet, exercise, and temperance will do the rest.

G. M., Liverpool.—Put a few drops of olive oil every night on the warts, and the same quantity of acetic acid every morning. Keep the bowels regular with the same pills as for J. P.

J. P. L.—Go on, and I hope you will soon be well—glad to hear he is so much benefited.

Leighton Buzzard, Bedfordshire.—If private advice is wanted, see standing notice—If not, say so.

F. A. Lincoln.—Blue pill, three grains; extract of colocynth, five, made into two pills. Take one, night and morning, twice a week. Look to the diet, and take more exercise in the open air.

Quæro, Minories.—Anderson was a Scotchman. The recipe I gave was the Scotch one, as prepared in the first Apothecaries' Hall, in Scotland. They may be had from the new Apothecaries' Company, or the old either, or any other in Scotland, Glassford-street, Glasgow. Quæro's chemist, I dare say would, if it suited him, give Barbadoes aloes. There are other kinds if that is objectionable, but I would place little reliance on the skill of any counter-jumper who talked of leaving out alchohol from Anderson's Pills. He may be a druggist, but we deny that he is a chemist, or he would know his trade better. Has Quæro anything to do with the quack Anderson's Pills? if so, we don't wonder at his notice of our copy of the real prescription, which we call upon our readers to copy and distribute as the best.

Esther.—Had better rub the neck night and morning with violet powder, to be had of any druggist. Take once or twice a week four grains of extract of colocynth at bed time, and a wine glass of salts in the morning. Look to the diet.

M. S. Darlington.—These cases require to be seen before one can really distinguish what they are. It seems very like cataract from the description, and would require an operation to remove it. There is one test—does he see better towards evening?

W. A. Islington.—Does not state the case clear enough to enable one to distinguish whether the eye itself is diseased, or whether the feeling arises from indigestion, which we have often known to be the case. At all events, a blister or seton at the back of the neck would be advantageous, and the bowels must be strictly attended to.

J. P. Allen.—It is the opinion of some of the ablest physiologists that ale is decomposed; or in whatever manner alcohol may be given, that the nutritious matter separates from the spirit. We are of opinion that the pure alcohol itself is absorbed into the circulation, and we are inclined to give credit more to this opinion from the spirituous odour which proceeds from the lungs of a person who drinks brandy, gin, &c.; an odour sufficiently powerful to revive drowned persons. The stomach of course has nothing to do with such an odour, except wind, such as in belching, arises directly from it. Alcoholic liquors hasten digestion but do not complete it. They get rid of the mass, but that mass of food is imperfectly digested.

Magdalen.—It would be impossible to do justice to her case unless by private correspondence.

N. P. N.—The very same observation applies to him as to Magdalen.

J. A. Yew Green.—Read the symptoms of consumption, and see how they apply to him. Flannel by all means.

Smith, Kingsland, and *T. S. Creste*, next week.

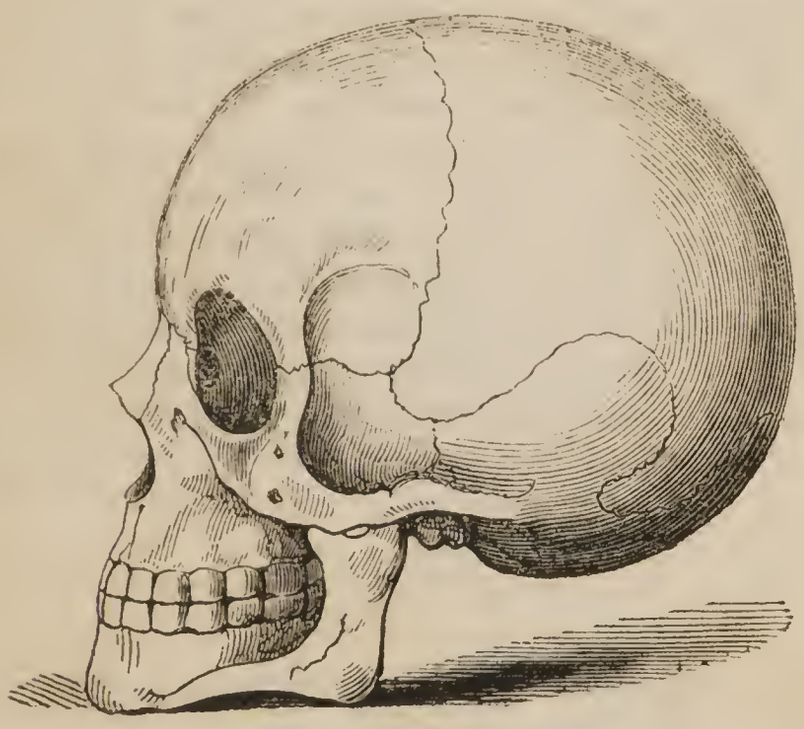
N.B. Medical Advice will always be given to any person (gratuitously) through the pages of the FAMILY DOCTOR; but it is necessary to give age, sex, employment, symptoms of disease, length of its duration, together with the most probable cause, or at least to describe the commencement of the attack. Any one may have advice through the above medium—viz., *answers to correspondents*, without the necessity of giving their names, or the possibility of their being made known; only, there may be questions which we shall decline answering in our pages, in which cases the patient may correspond with the editor, receiving advice until cured, on payment of 2s. 6d., as a fee, in the outset. In all cases direct to the Editor of the FAMILY DOCTOR, 4, York Cottages, St. Mark's-road, Camberwell New-road, London.

THE

FAMILY DOCTOR.

ILLUSTRATED.

No. 11.] AUGUST 16, 1845. [PRICE 1½*d.*



BONES OF THE HEAD.

THE skull or *cranium* is divided by anatomists into two divisions, for the better consideration and arrangement of each:—1st. the head, 2nd. the face. The structure of the cranium proves how much nature was anxious to defend the brain from injury. In all her works there is a pre-eminent design. Had the skull been composed by only one bone it would have been more easily broken, and a knock on one part would have conveyed over all the general shock, causing death far more speedily and certainly than when there are many bones. Besides, but for the different bones or plates lapping over the brain, and being in the new-born child easily moveable one over the other, no human being could be born alive. Thus these bones serve their purpose at the hour of birth, and all throughout life; as we advance in years the bones unite with each other, but the edges of each are jagged, and the union forms a

suture just as if two saws were fixed together or dovetailed. When, therefore, a blow strikes one part, the vibration does not extend over all, but, except in terrific falls, confines the injury to one part alone. The mere form of the skull proves its capacity to endure considerable pressure—the form being that of an arch. This also shows the admirable design of nature in providing a strong shield for the brain, capable of resisting considerable mechanical presure. The bones composing the skull are at the brow, the *frontal;* at the back, the *occipital;* at the sides, the *temporal* and *parietal.* There are also the *sphenoid, ethmoid,* and the *wormiana* bones. The face is composed of the nasal and palate bones—the lacrymal and vomer—the upper and lower jaw-bones, and inferior turbinated and malar bones.

It is well known that from the form and devolopment of the skull phrenologists have endeavoured to describe the character and dispositions of men. There can be no doubt as to the adaptation of the bones to the brain, and the brain to the bones; but it does not always follow that there is a depression within when there is a bump without, although it must be granted that the predominant features in the disposition of animals may be detected from the formation of the head, and that the peculiar formation always accompanies the peculiar disposition. This is not the place to discuss phrenology, we agree with its advocates as to the truth of the science, but not as to its practical application. We direct attention briefly to the diseases and accidents to which the scalp, skull, and brain are liable. The scalp or integuments covering the skull are liable to

wounds, such as cuts, tears, or bruises—the punctured wound is the most fatal. Indeed, the vast number of blood-vessels covering the skull render wounds extremely dangerous, and great watchfulness is required to avert inflammation—stitches, plaisters, and pressure should be avoided if possible. The sides of the wound should be merely placed together, and kept so by a bandage (the double-headed roller). A piece of lint should be dipped in water and laid over it. The diet should be low, and the bowels kept open. Every care should be taken against any affection of the brain, and on the slightest appearance bleeding must be resorted to, smart purgatives administered and tiatarized antimony used. Punctured wounds always bring on inflammation, extending to the membranes of the brain, and even to its substance. The wound should be poulticed, the hair, of course, being shaved off all round the part. The patient should be put on low diet and in a dark room; matter sometimes accumulates, which should have a free exit by incision. Blows on the head produce symptoms of depression on the brain; but if the pulse is not low and heavy, nor the breathing heavy and snoring, there need be no alarm. The brain is however compressed by blows and falls upon the skull. Blood, water, or depressed bone, may produce the symptoms of depression, which are loss of sense and voluntary motion, slow heavy pulse, snoring, oppressive breathing, and dilated pupils. It is unnecessary to say that in such cases an operation is necessary, more especially from depressed bone. We must reserve our further remarks upon the brain until we treat of the brain itself, spinal marrow, and nervous system.

DIALOGUE WITH A TAILOR.

A PALE slender man, between thirty and forty, came shuffling into my consulting-room with a peculiar gait—a gait which, combined with the turning out of the knees of his trousers, at once led me to suppose he was a tailor, just come in at the dinner-hour for a consultation.

"Well, sir; what have you got to say?"

"A great deal, doctor; but as I know your way, I shall be as straightforward in my statement as I can. I am a tailor, about thirty-five years of age, and a married man."

"Now, for your complaint?"

"I have many of them, sir. I should say the worst was bad digestion."

"I never knew a tailor who did not complain of that."

"Especially, sir, if he sat on the board. Yes, sir, we are all troubled with indigestion, and our bowels are very irregular; what is the reason of that, as you are fond of explaining causes—"

"Simply, want of exercise; the constrained position in which you

sit, and the fact of all the muscles of the abdomen and lower extremities being, as it were, slumbering all day. The muscles of the arm and shoulder are the only ones employed with anything like activity. It is very important for good digestion, that the legs and lungs should keep each other in pretty good exercise; without that, the blood is not purified, nor the system properly emptied and invigorated."

"That is the reason, then, that we feel so exhausted at times, and feel stupid in the head; and a confused feeling creeps over us, that a glass of spirits removes for the time."

"Ah! the atmosphere of your workshop has a great deal to do with that. The smell of the new cloth, the perspiration, and closeness, combines to poison the air, and deprive you of the little remaining chance which pure air afford you for digestion. You breathe improper air, the circulation of the blood and its qualities will be materially affected, and consequently digestion rendered doubly ineffective."

"I have been touched with a cough, and very often a pain in my chest."

"No doubt you will; but you must attribute that to your bent body. You lean your head forward, and oppress or impede the working of the lungs; the want of exercise and air combined with the leaning, are sure to end in an attack of consumption."

"The leaning certainly affects us, and I have seen it spoil the shape of many a well-made fellow."

"Undoubtedly; because the spine becomes curved from want of due exercise for the muscles of the back. The bones of the spinal column yield for want of vigorous support; and most tailors have their backs more or less crooked. You have no ruddy-looking, strong, muscular men amongst you."

"Very few, sir; the colour soon goes, and the flesh, too."

"The sitting, too, is calculated to produce a very annoying and afflicting disease which is peculiar to tailors. The position of the legs, the inactivity of body, and sedentary occupation, produce fistula."

"It does sir. There are clubs amongst the trade for its cure."

"I am aware of that."

"Can you devise nothing, doctor, or suggest nothing for us?"

"Oh, yes; many things! We may say that the stomach, lungs, heart, and liver, are chiefly affected; and we know the cause. I would therefore suggest shorter hours of labour, more exercise, better ventilated rooms, and the abolition of the absurd position which tailors assume—cross-legged."

"The first might be done, perhaps easily; but I don't see how the change of position is to be effected."

"Just as I anticipated. It is a custom, an absurd one, and a murderous one, too; and yet it must be adhered to like many other antiquated evils. Why not, for instance, bring the cloth on a level with the chest, as if you sat at a table. You could cross your legs

like a Turk in a chair, if you cannot sew any other way, and thus save the leaning forward; but, of course, that would be too much to expect, and you must pay the penalty. How do women sit and sew? cannot a man do the same? We cannot, for the life of us, see anything to prevent it; but much to recommend it. The obstinacy of working-men themselves often prevents improvements being adopted. All we can say, sir, is that shorter hours, better ventilation, alteration of your position when sewing, and more exercise, will make you as healthy, as hearty, and as strong, almost as a mason or railway navigator. These general rules applied to your labour, and alterations suggested, will serve far above all medicine."

"In the meantime, doctor, cannot you suggest anything that might be of temporary relief?"

"Read our articles on 'Diet,' 'Times of Eating,' &c. Keep the bowels regular with four or five grains of extract of colocynth, and occasionally with four grains of blue pill; be temperate, regular at meals, eat sparingly, and walk, run, or jump, as much as ever you can, in the evenings or summer mornings. Bathe yourself often; keep the pores of the skin open and clean with warm bathing, always get into the open air when you can, and you will find an improvement, although, perhaps, not a cure, as the cause of the evil remains.

CASE OF DISEASED THIGH-BONE, MISTAKEN FOR DISEASE OF THE KNEE-JOINT.

RELATED BY THE LATE MR. ABERNETHY, IN HIS ANATOMICAL LECTURES.

A Gentleman who was an officer in the army, was troubled with great uneasiness and stiffness of the knee-joint. He had attended to the advice of several medical men, but got much worse, insomuch, that marching was the greatest possible punishment to him. Having been looking over the list of surgeons one day, he thought within himself,—"Why, John Abernethy! that's a curious name; I'll go to him." He accordingly consulted me; and after having an interview with me—he no doubt thought I was a curious character; for I said to him, "well, sir, there's nothing the matter with your knee-joint; the disease is not in your knee." "Well, sir," said the gentleman, "and can you tell me where the disease is?" "Yes," said I, "I think I can: the disease is in the thigh-bone." "Well, sir, and can you tell me what will do it any good." "Yes," said I, "I can. You must clap on a blister opposite the part affected, and keep it open; and you must do so and so, and so and so, with regard to your diet, and the management of your general health." He did as I had bid him, and he got perfectly rid of this troublesome affection. But he allowed the blister to heal up, and about two or three months after, he came to me again, with the same affection. I told him precisely the same

thing as before, and he then objected to the blister; and I said to him, "well, I grant you, the blister is very annoying; and as there is an objection to it, put in an issue; that will not inconvenience you much;" he did so, and got perfectly well, and lived fifteen or twenty years after that period.

MORTALITY OF LABOUR.

"AMERICAN slaves live longer than their masters, while English workpeople die prematurely of hunger, wet, cold, and sorrow. In America, the increase of slaves in one way only—that is, by births, is more rapid than the increase of free people in three ways, by births, by the emancipation of slaves, and by emigration; and the proportion of slaves being a hundred years old is 1 in 1400, while the same proportion of whites is 1 in about 14,000, showing a difference of 10 to 1 in favour of the longevity of slaves. The peasant of the south of England suffers nearly all the evils, but enjoys none of the advantages of slavery. He is not a freeman, nor is he a slave; he is a pauper."

I have made several extracts here from Mr. J. Fielden's excellent work, *The Factory Curse*, relative to the evidence afforded by the most distinguished medical men, concerning the effects of factory labour on the human frame.

First. Sir Charles Beel gives it as his opinion "that the working of children, ten hours each day, exclusive of the meal hours, is not only prejudicial to health in practice, but painful to the human mind when the idea is entertained."

Second. Joseph Henry Green, after speaking of the long list of diseases produced, such as white swellings, spinal diseases, consumption, &c., remarks, "I fear that this country will have much to answer for in permitting the growth of that system of employing children in factories which tends directly to the creation of all those circumstances which will inevitably lead to disease."

Third. Wm. Sharp Jinks, "I think amongst the ill-effects produced, the injury to the general health is of most consequence, I would not lay so much stress on the deformities as on the breaking up of the constitution; the injury to the general health."

Fourth. Samuel Smith, Leeds.—"There is never a year passes, but I see several instances where children are in the act of being worn to death by working in the factories."

Fifth. Charles Turner Thackrach, Leeds.—"My opinion is that young children should not work at all; that the period of growth ought not to be the period of labour."

Sixth. Benjamin Travis, London.—"I consider that next to wholesome food, pure air and wholesome exercise, by which I mean regulated variety of motion, are the principal agents in the establishment of corporeal and mental health."

Seventh. James Blundell, London.—"I look upon the factory towns as nurseries of feeble bodies and fretful minds."

The government have caused officers to be appointed all over the nation, whose duty shall be to register the births, marriages, and deaths. I have seen and examined the first Report issued, and I shall now proceed to lay before you the results of their inquiries and authenticated reports.

The towns of Manchester and Salford contain a population of 236,935, out of whom, in one year, died 4047 children under *five years of age.*

The town of Birmingham, certainly a manufacturing town, but not a cotton manufacturing place, contained at the same time a population of 110,914, out of whom only 1471 children died. This affords a comparison between town and town, populous neighbourhood and populous neighbourhood.

Let us now compare Manchester and Salford with the agricultural and mining districts; and remember that this is a Government return and cannot be disputed.

Cornwall contains a population of 304,785, (much greater than that of Manchester) and yet the deaths amongst children in one year amounted only to 2217.

Essex has a population of 304,315, and the deaths there in one year, under five years of age, amounted only to 2137.

These remarks will enable the reader to understand the following table, in which I have contrasted the deaths under five years of age, and the deaths between seventy and eighty, and upwards of ninety. Taking the two extremes the medium will be a just conclusion as to the mortality of districts and employments.

I might easily give at the same time, a table of the diseases of which the inhabitants die, but I conceive I shall answer the end as well by stating a few cases in proof. Nervous diseases, especially convulsions, prevail to a much greater extent in Lancashire, there being deaths from nervous complaints in one year in Lancashire, alone 2,552 cases. In Wales, &c., only 2,113 with a much larger population. Consumption, too, prevails to a much more fearful extent in the manufacturing districts. The deaths in Lancashire were 4,663. In Wales, &c., only 3,879. Diseases of the digestive organs produced death, in the first district, in 699 cases. In the second, in only 399. Deaths in childbed were 113 in the first, only 84 in the second. Even in regard to violent deaths the mining districts do not much exceed Lancashire;—in the mining 355 cases, in the manufacturing 341 deaths.

RECOLLECTING AN ADDRESS.

Dr. Reid, well known by his medical reports in the "Monthly Magazine," was requested by a lady of literary eminence to call at her house. "Be sure you recollect the address," said she, as she quitted the room, "No. 1, Chesterfield Street." "Mádam," said the Doctor, "I am too great an admirer of politeness not to remember Chesterfield, and I fear too selfish not to remember number one."

CONSUMPTION.

PREVENTION OF.

In rearing children who are liable from hereditary causes to be afflicted with consumption, great care should be taken to repress the *precocity of intellect*. The mind had far better be retarded until the body is strong enough to endure its vigorous action, than have a mental phenomenon, combined with a physical object of pity and compassion. Bodily exercise had better be encouraged than mental. *The clothing* should be no warmer than necessary, but flannel is decidedly necessary. Some recommend the flannel to be worn over the shirt, and perhaps it will answer as good a purpose in some cases, but we incline to the flannel worn on the skin, because a species of electric action is produced from the friction. Flannel over the shirt is the same as flannel lining, and those who wish to reserve the flannel close to the skin until a riper age, should at least use it in the shape of drawers; and the feet should be well protected from wet, above all other things. The use of close Mackintosh cloaks should be avoided as calculated to confine the perspiration: a good strong rough coat is better in cold weather than any other.

Exercise should be resorted to on every convenient occasion, on foot and on horseback: athletic sports should be indulged in, especially rowing, but fatigue should be avoided. The great object being to strengthen the system; generally speaking, singing and running should be encouraged to strengthen lungs and muscles. The great mistake made is, that of treating weakly children so very delicately, and wrapping them up lest they should catch cold, &c., and this pains taking, generally produce the opposite effect intended, it makes the child softer instead of hardier. We hold that the first duty of a parent or medical man, is to see that the patient becomes strong, hardy, and athletic, by suitable exercises in the open air, shower baths, bathing, early rising, &c.

The diet is another thing to which great attention must be paid. Some medical men recommend nothing save fruits and farinaceous food. In some cases, the tendency to inflammation is such, that animal food is too stimulating in the treatment of consumption, but we are now speaking of its prevention. Every animal that feeds on flesh is most decidedly possessed of strong lungs. Witness the difference between the roar of a lion and that of an ox. When the person subject to consumption can take exercise, let him eat animal food at least once every day. If the animal food can be had underdone, so much the better. The rawer the food, the more good it will do. We have tried it and know the effects. When a boy, we reasoned on the effects visible in animals from various kinds of food, and although having a very delicate constitution and a still more delicate appetite, we succeeded in managing, half-raw food. We took great exercise, hunting, fishing, shooting, running, rowing, leaping, climbing, &c. &c. Ten or fifteen miles of a stretch, with the

hounds, on foot was done easily, and the consequence is that we are over thirty, stout, healthy, hearty, and possessed of a pair of lungs, that can carry us where other persons can. We act on the rule of strenghtening the system, and having followed that, it is lamentable to look back and see how the ranks of our old schoolfellows have been thinned, whilst we, the weakest, are living and like to live. Good living, that is plenty of animal food, and a moderate quantity of good malt liquor, we hold to be essential in the treatment of consumption. Slops and fruit, potatoes and cabbages, are all very well for such theorists as Brotherton and Co., with their vegetable diet, but we know which strengthen the lungs best, and nature points it out too.

There is another point to which we must direct attention, that is *climate*. There are some persons who cannot get rid of consumption in this country do what they please, unless it be when persons from a clayey county, or a mountainous range, come to a chalkey county, such as in Sussex. Devonshire and Cornwall are considered good places. Madeira is, however the great resort of consumptive persons from the mildness of the climate. Change of air is often absolutely necessary, and when people can afford it, it is far better to seek a foreign climate at once. The south of France is as good a place as any. We may remark, however that the sea-side does not answer so well as inland, nor the highlands so well as the lowlands. In both cases the air is pure and keen, although, be it remarked, that life at sea often, particularly from the purity of the air, the diet, appetite, and change of climate, cures persons subject to consumption.

This leads us to remark upon *employment*. No person subject to consumption should be employed at any trade where dust flies much about, such as a carder or needlegrinder, where the occupation is sedentary, such as a clerk or tailor, or where there is much blowing required, as a glass-blower or musician. Pursuits requiring much exposure to the open air, are to be preferred, and where much motion is necessary on foot or horseback. If we were asked what trade would you teach your son if he was subject to consumption, I would answer: if I could get him a berth in the church, or on board the navy, or in the East India Company's service, I would do so, as his lungs and his health would in either case be improved; a carpenter, a joiner, a mason, are also healthy trades; but if I wanted to eradicate the very seeds of consumption out of his frame, I would send him to a butcher, and let him dress the carcases after they were killed. There is nothing in the kingdom of medicine that acts so certainly as the juice and effluvia of sheep and cattle. The pores of the skin drink in the juice of animals by the handling, and they strengthen the system in a silent but sure manner. We have seen weakly sick persons become truly robust men, and that too from a cause they seemed but little acquainted with. I never knew a person sent early enough to a butcher who died of consumption. It is almost unknown amongst them, and they have to thank the animal

food alone for the result. Let the patatoe-eating, cabbage-crushing, apple-pinching, vegetable-diet-mongers gainsay that if they can. No they cannot, the reason is a natural one, borne out by observation, and upheld by experience. There is nothing—there cannot be any thing better adapted to strengthen the lungs, and increase muscular development so much as animal diet, and animal food seems therefore the best for the slender, pale, emaciated, sinking frame of one predisposed to consumption. Treatment and cure next week.

RECEIPTS.

We sometimes recommend these infusions, and think it best to give the recipes for the convenienee of our readers:—

COMPOUND INFUSION OF GENTIAN.

Gentian root sliced and bruised on drachm, dried Seville orange-peel one drachm, fresh lemon-peel two drachms, boiling water three quarters of a pint; to stand for twenty-four hours and then be strained, &c.

INFUSION OF QUASSIA.

Quassia root rasped one scruple, boiling water half a pint; stand for twenty-four hours and strain.

INFUSION OF BARK.

Of the best cinchona bark half an ounce, coarsely powdered; boiling water half a pint; to stand twenty-four hours and strain. Buy it in the bark, and see it bruised, or do it yourself. By no means use the powdered bark which the druggists keep *ready* pulverised; for they not only "powder" but adulterate it.

INFUSION OF RHUBARB.

Take two drachms of the best rhubarb root, bruise it well in a clean iron mortar; put it in a clean covered vessel, add one pint of boiling water, let it stand twenty-four hours and strain.

INFUSION OF CALUMBA ROOT.

Bruised Calumba root one drachm, boiling water half a pint; treat as the others.

OIL OF TURPENTINE IN WORMS.

Oil of Turpentine is considered almost a specific in worms of all kinds. The dose, however, is important. If the quantity be too small, it will affect the kidneys and skin: therefore one or two drachms may be safely administered at intervals to children of three years old, and five drachms to older children, and one or two ounces to adults. It may be given uncombined with other medicines, on an empty stomach, the child observing a strict abstinence during its use.

HEART AFFECTIONS.

On this subject, Abernethy observes, in his lectures, "I have seen plenty of cases of great affection of the heart having been relieved by putting the bowels to right. There was a *chere amie* of one of my pupils here, whom he asked me to see; and, upon my word, I thought she had an organic affection, and I said, "Pray, ma'am, is there not any particular time at which you find your heart get worse?" "O, yes, always after breakfast." "Pray, what do you take for breakfast?" "Tea." "O don't take tea any more; I would never take into my stomach that which seemed to provoke the complaint." This led to a little lecture on diet, and the result was, that she was to take bread and milk; however, I thought it was a lost case. It was about a year after this time that I was going up a street, and just about to turn a corner, that I met a man; he took off his hat; I took off mine. He looked, and I stared. We gradually approached each other. He asked how I did, and I hoped he was well. We talked a little about the *weather*, at last I recollected him, and said, "Pray, sir, may I be allowed to ask how the young lady is?" "O, sir, you have cured her, perfectly cured her, by causing her to take bread and milk for breakfast." Many a man feels a pain in the heart, when there is no disease there; but I never knew any one who was labouring under an inflammation of the heart, who complained of pain in the part actually affected; they either did not complain of pain at all, or referred it to some other part, not in the region of the heart. I have known them complain of pain in the region of the liver.

THE LAST SYMPTOM.

We have heard of a sweep who, pot-valiant, swore that if parliament did not alter the act which affects climbing boys, there would be a revolution; but we were not prepared for the last symptom of a dissatisfied people's determination to be free, which a friend of ours related the other day.

Friend C. entered a druggist's shop to purchase some trifling medicines :— "Well," said he to the man of the pestle and pills; "what do you think of Sir James Graham's medical reform bill?"

"Think of it! why, sir," said the pounder of simples, "it will be our ruin—it will open the floodgates of physic, beat down our prices, and reduce the profession to a mere calling: physic may then be thrown to the dogs. But, sir," said he, lifting his spectacles on his crown, and holding up his pestle in a warlike attitude, like Prince Albert; "but, sir, we will not starve,—only, sir, let that bill pass, and public indignation will boil up—aye, sir, ferment to such a pitch that we will have a revolution—a revolution! mark that, sir." And down came the weapon upon a glass measure, smash-

ing it to atoms. Friend C., as soon as the scene had passed over, quaintly asked whether the apothecaries would get their patients to fight for them. Sir James Graham ought to look to this and put a guard over the hospitals, and a detective on the watch at each apothecary's shop, for it is hard to tell when the cries may be "Physic and Fatherland."—"Free trade in purging."—"Black draughts for ever."—"Down with the Pills."

POISONOUS PLANTS.

As there are many plants which are highly poisonous cultivated in gardens for the beauty of their flowers, and also sold in nosegays in the markets, from eating which by children (an accident that sometimes happens) fatal consequences have ensued, I shall give a brief description of some of them, and the uses to which they may be applied with proper caution.

LARGE BLUE WOLFSBANE OR MONKSHOOD.

This plant is much admired by many for its long spikes of dark-blue flowers, and is therefore cultivated by many persons, particularly near London. It is, however, of a most dangerously poisonous character, and when eaten, as it sometimes has been by mistake, it occasions vomiting, purging, giddiness, delirium, fainting, cold sweats, convulsions, and even death.

It has been employed in medicine, but the danger attendant on its use will deter its frequent or extensive exhibition.

FOX-GLOVE.

This plant has lately been much cultivated near London for the sake of its flowers, which like those of the monkshood grow on a spike. They are shaped like an ale-glass, or the finger of a glove (hence its name), and they are either white or a very light purple. This, like the former, is highly poisonous, producing vomiting, giddiness, and an affection of the sight, and sometimes proves fatal. It is used in medicine. We may here observe, that plants whose flowers resemble a cup, and are of only *one leaf*, are all poisonous in a greater or less degree.

BLACK HELLEBORE.

This is sometimes cultivated in our gardens for its flowers, which appear in December. Its root is bitter, nauseous, and highly poisonous, occasioning vomiting, convulsions, and other dangerous effects.

It is now scarcely ever employed.

DEADLY-NIGHTSHADE.

This plant grows much in hedges, and is often admired for its beautiful bunches of star-like purple flowers, which turn to bunches of light orange-coloured berries, having somewhat the appearance of of currants, and have often tempted children to eat them, when they have produced the most dangerous and even fatal effects. They are sometimes called by children, *poison berries*.

It is used in medicine.

INVALID'S CORNER.

"Amusement is conducive to the Restoration of Health."

THE POISONER.

(*Continued from Page* 152.)

"You perceive, madame," answered the Abbe, "that we must set out before this evening. What do I say—this very hour—even in an instant you may be arrested and conducted to the prison of the palace. Leave this town and convent: nothing is easier. St. Croix awaits you in a carriage."

As he spoke, he opened a window, and pointed to a travelling coach which was several paces distant from the convent.

"Fly, madame! fly, and save two victims from the implacable justice of men."

He threw a long mantle on the marchioness's shoulders, and in spite of herself dragged her towards the stairs. The three nuns, of whom we have spoken in the commencement of this chapter, entered by the other door. They seemed to concert something between themselves, and spoke in a low voice.

"I tell you it is her who has just gone out with the Abbe."

"And I tell you again," said Amelia, "that you are deceived, sister Marguerite is not so tall."

"The mantle caused that appearance," hazarded the nun.

"Hold! will you believe your own eyes?" replied the first nun, opening the window. "It is her who ascends the carriage—she turns towards us—she makes signals—see, see, sisters, she calls to us—hearken her cries!"

"What is going forward here," said the superior.

Martha entering at this moment: a plaintive cry was heard, amidst the rumbling of the carriage-wheels.

The superior went towards the window, but a letter which she trod upon attracted her attention, "What is this," asked she. Amelia picked it up, and presented it without speaking. The countenance of the superior became purple."

"Let them bring sister Marguerite here directly," exclaimed she, at the extremity of despair.

"Impossible, madame," said the Abbe, entering.

"The Abbe!" exclaimed the astonished nuns.

"Yes, sisters," replied he, ordering his soldiers to retire a few paces. He approached the superior, and said in a low voice, "Madame Brinvillier leaves Liege this moment for Paris."

"For Paris?"

"To be there tried before Parliament."

"But who are you then who has delivered her up?"

"Desgrais, the provost's officer."

PART IV.

UNDER the reign of Louis XIV. the Place de Greve of Paris had a very singular appearance. It was longer, narrower, and more irregular than it is now. On one side arose the massive Town-hall of Dominico Boccardo, a colossal building, amidst the humble cabins around it. On the other side, leaning and crushing each other, were the houses of the fifteenth and sixteenth centuries, flanked with round and octagon towers, and adorned with sculptured fronts and pointed roofs. In front of the place there was a stone cross looking towards Notre Dame—the pedestal buried in the sand. Every year the people came to this spot to let off fireworks, at which the provost assisted. Always when it pleased the members of Parliament to condemn the innocent or guilty there the scaffold was erected. On the 16th of July, 1676, this place was agitated in every sense of the word. In the streets, places, quays, groups were everywhere assembled. Those who were walking, and they were numerous, went on with a studious look, stopped with marked attention, and spoke in a low voice. There was one surprising thing, at every step nobles were found mingled with the citizens, and women of quality amongst the rabble.

What great event could possibly have produced such a sudden fusion of all classes? What spectacle does Paris then afford itself, so that the lofty nobility were confounded with the shopkeepers of the quarter Bourdonnais? They were merely about to behead and burn Marguerite d'Aubray, Marchioness de Brinvilliers. "The day will be fine," said a beggar, in the midst of a crowd of dirty and ragged looking vagabonds, who under various names at that period formed fraternities of Bohemians, or rather, more properly speaking, pick-pockets, under the command of the great Coesre.

"Good," replied another ragged fellow, with a dissatisfied air, whose duty was to counterfeit an epileptic person by the aid of a morsel of soap put into his mouth. "Good! that ought to be the case, for we have not, for many a day, seen such a gallant company in the Place de Greve. But this cursed La Regnie keeps too close a watch with his cursed spies."

"Ah! it was different in my time," cried an old beggar, in a tone of lamentation. We then begged at our ease, and cut a purse in open day. We could assemble in troops, and no archer durst have pursued us through the narrow streets which led to our habitations; now we are not permitted to carry arms. They go to your houses, and arrest whom they please; and every day the gibbet is adorned with some of our children. What will become of us, holy virgin, with this De la Regnie?"

"Silence, every one of you."

"Listen. The great Coesre's Aid," said the beggar, in a low voice.

The person was in fact the lieutenant of the king of the Cour

des Miracles, upon a signal given, they all retired into an alley upon the Quay Pelletier so as not to be disturbed by any one. When there, the Aid said, in a mysterious manner, distributing amongst them gold and silver, "Do not be far from the place of execution, for it will be a bloody affair. We must revenge ourselves upon the lieutenant general by killing his archers and rescuing the accused."

"Ah! so you think you can do that?" said one of the beggars, maliciously.

Without noticing the interruption, the Aid continued, "all the beggars of the Court St. Saviour are warned; and before an hour will be on the Place de Greve, armed."

"But the ordnance of De la Regnie—" asked the old man.

"What does that signify? What do we desire but to reconquer our rights, and hand down liberty to our children. I may rely upon you—?"

"Yes, yes," answered all the beggars; "we neither want De la Regnie nor his archers."

"Six o'clock—the corner of the street du Mouton."

And he proceeded towards the bridge Notre Dame.

"The Marchioness Brinvilliers," said the beggar who had made the interruption, "may flatter herself in the famous defender she possesses in this Italian."

They all ascended the Greve, feigning various afflictions,—begging, and cutting purses adroitly from the girdles of the citizens. The scholars and clerks distinguished themselves by their tricks upon the citizens and the jokes they uttered.

To be concluded in next number.

TO CORRESPONDENTS.

Z. Y. C., Mile End.—Study the means of preventing consumption in this No. Keep your wife's bowels regular, and let her have occasionally 10 or 15 drops of tincture of valerian.

G. A., Strand.—Read article on deafness, No. 5. We should think a blister or a seton at the back of the neck would remove the complaint.

For Chilblains.—Citron ointment, 4 drachms, camphorated oil of almonds and oil of turpentine, of each 2 drachms; mix and apply night and morning.

S. W. L.—If, in coming out of the water, the skin becomes flushed and is in a glowing heat when you are dressed, accompanied with a feeling of lightness and muscular activity, then bathing will agree with you. The shower-bath and the plunge are both good. If weakly, you can spunge the body first for several days, and then use the shower-bath: never bathe immediately before or after a a meal; an hour and a half after breakfast is the best time.

Rodolph.—Use the shower-bath, bathe often, and take plenty of exercise to fatigue yourself slightly.

A. D. Well-wisher.—It would be the marsh-mallows, with which a decoction would be made. It was used of course as an injection.

H. H. Leeds.—For the throat, get a handful of rose leaves, pour over them about a pint of boiling water add a few drops of sulphuric acid, or a lump of alum, strain, mix with honey, and use as a gargle; infusion of rhubarb, half a pint, sweet spirits of nitre, quarter of an ounce, mix, one table spoonful three

times a day. Take some smart purgative before using either of these remedies. Mind the diet. Send her to the seaside in a month.

Alpha.—His complaint seems to be a touch of asthma. Try what smoking stramonium leaves and shoots will do. The bowels, above all things, must be kept regular. You should see our article on asthma—read it again.

W. A., Manchester.—Ung. alethœ will keep the sore open. If he wants it closed, open the bowels well, poultice, and then use an ointment of citron and blue ointment—equal parts—used during the day.

T. V., Salt market.—It is not very easy guessing at his complaint, unless we looked into his throat to see if it was diseased. Try mucilage one ounce, syrup of squills three drachms, juice of lemon, an ounce of liquorice juice, and make into eight ounces with camphorated mixture. A teaspoonful when the spitting is troublesome. If he feels any way better, he can do as he says.

L. R., Islington.—Try the above mixture also, and likewise four grains of blue pill, twice a week.

Laterum Structa.—Glad to hear he improves. An embrocation will do good. Hartshorn one ounce, soap liniment one ounce—rub in each night before the fire. Try syrup of squills half-an-ounce, paragoric two drachms, camphorated mixture to make eight ounces—sweeten with syrup. A teaspoonful every three or four hours. Mind the former instructions.

Wm. Quid.—We don't think the skin but the clothes to be the source of the vermin he speaks of—fumigate them, and try. Rub some blue ointment over the scratches, but not too often, only once or twice. The eyes should be protected with spectacles that do not magnify. Dash cold water upon the eyes every morning. We do not mean to give up the biographical sketches altogether, but to vary the work. Perhaps we may occasionally present one.

Thos, Silvester, Staffordshire.—Yes. Brush his head three times a-day with a hard-brush, and if he wants an excuse for so doing, apply a little pomatum; but the real secret lies in the rubbing—that surpasses the grease of a whole bear.

J. S. R.—Give up the smoking, keep the bowels regular, and chew Turkey rhubarb occasionally.

J. S. Preston—Try what warm coffee will do, and see the bowels smartly opened once or twice a week. Be more explicit as to cause, symptoms, &c. when you write again.

Smith, Kingsland.—His case would have been much better managed privately; and more justice done to it. R. Pulv. Opii. Gr. $\frac{1}{2}$. Extr. Conii. Gr. $\frac{1}{8}$. Pil. Hydrarg. Gr. iii. Mix and make into one pill to be taken twice a week. Get six pills, a dose in each

C. R. Worcester.—Will have received an answer long previous to this—illness delayed it.

Smithfield.—It is a very old standing case indeed, but we think that the following will do good; get it prepared as directed. Pulv. jalap, one drachm; Supertart. potass. one and half ounces; Confect. sennæ. one ounce. Make into an electuary with simple syrup; Take a small teaspoonful night and morning.

W. D. Shoemaker.—Eat a good many vegetables, and also use vinegar and lemon-juice frequently; use the golden ointment to the sore, and keep the bowels open with rhubarb pills; two night and morning twice a week.

J. L. Charlton-on-Medlock.—Lose no time in taking him to the Infirmary on visiting days, and you will be told whether there is disease in the eye itself—these things must be seen; if there is any inflammation, use sugar of lead, 10 grains; sulphate of zinc, 10 grains; rose water, 8 ounces; mix and use frequently.

N.B. Medical Advice will always be given to any person (gratuitously) through the pages of the FAMILY DOCTOR; but it is necessary to give age, sex, employment, symptoms of disease, length of its duration, together with the most probable cause, or at least to describe the commencement of the attack. Any one may have advice through the above medium—viz., *answers to correspondents*, without the necessity of giving their names, or the possibility of their being made known; only, there may be questions which we shall decline answering in our pages, in which cases the patient may correspond with the editor, receiving advice until cured, on payment of 2s. 6d., as a fee, in the outset. In all cases direct to the Editor of the FAMILY DOCTOR, 4, York Cottages, St. Mark's-road, Camberwell New-road, London.

THE

FAMILY DOCTOR.

ILLUSTRATED.

No. 12.] AUGUST 23, 1845. [PRICE 1½*d.*

ANATOMY.

WE have already presented to the reader the skull and bones of the chest. It was our intention this week to present the whole of the skeleton in a drawing; but, through an error, our artist has not procured the drawing in time. We must, therefore, request the reader to refer to No. 9, August 2; it being unnecessary to repeat the impression. He will then have a front view of the spine, of the ribs, and the bones of the pelvis. The spine is the most wonderful piece of mechanism in the body. The form is that of the letter S; not so much curved, of course. It is composed of twenty-four bones, called vertebræ; a single bone being named a vertebra. The spinal column is divided into three regions: 1st, the cervical vertebræ, or those of the neck; 2, the dorsal, or those of the back; 3, the lumbar, or those of the loins. On the summit of the spine, the head is fixed by means of the atlas and axis bones; the former so called from supporting the skull after the heathen mythology, which supposes the giant Atlas to carry the globe on his shoulders. The spinal marrow is protected by those vertebræ which are joined together by means of cartilage, so very pliable, as to allow the bones to move on each other. Had not this been the case, a fall might have snapped the spine, provided it had been whole, and thus destroyed life by pressure on the spinal marrow. This spinal marrow is so very tender that a needle thrust between the bones, and touching the marrow of any animal will kill it at once. This process, by the Spaniards, is called pithing an animal. Eels are only killed instantly by that process. From the spinal marrow arise the nerves, distributed in the chest, abdomen, and lower extremities. They branch off particularly at the shoulders and hips. The bones are perforated, forming a sort of canal for the passage of the marrow. The bones are stronger in the back where most strength is required, and very firm in the neck. The bones of the spine are thus elastic; one being fixed into the other, and each hollowed out so as to admit of union, combining strength and motion.

Next week we shall give the whole skeleton, and a brief summary of the bones, their mechanism, use, injuries, and diseases.

N

A CANCER REMOVED FROM THE BREAST OF A FEMALE DURING SLEEP.

A Committee has been appointed at Paris by the government, to investigate into the truth of the statements made regarding animal magnetism. The readers of the Doctor, perhaps, will hardly credit the following statement, but it rests upon the authority of such respectable men, that there cannot exist, in the mind of an impartial and unprejudiced man, a doubt of its correctness. The case was reported to the Royal Academy of Science, by M. Jules Cloquet. The Committee observe:—"You have all heard of a case which at the time attracted the attention of the surgical section, and which was communicated to it at the meeting of the 16th of April, 1829, by M. Jules Cloquet. Your committee have thought it their duty to notice it here, as affording one of the most unequivocal proofs of the power of magnetic sleep. The case is that of a lady P——, aged sixty-four years, residing in the street of St. Denis, No. 151, who consulted M. Cloquet upon the 8th of April, 1829, on account of an ulcerated cancer on the right breast, of several years standing, which was combined with a considerable swelling (*engorgement*) of the corresponding auxilary glands. M. Chapelain, the ordinary physician attending the lady, who had magnetised her for some months, with the intention, as he said, of dissolving the swelling (*engorgement*) of the breast, had obtained no other result than that of producing a most profound sleep, during which all sensibility appeared to be annihilated, while the ideas retained all their clearness. He proposed to M. Cloquet to operate upon her while she was plunged in the magnetic sleep; the latter having deemed the operation indispensable, consented. The two previous evenings, this lady was magnetised several times by M. Chapelain, who, in her somnambulism, disposed her to submit to the operation,—who, had even led her to converse about it with calmness, although when awake she rejected the idea with horror. Upon the day fixed on for the operation M. Cloquet arrived at half-past ten in the morning, found the patient dressed and seated in an elbow chair, in the attitude of a person enjoying a quiet natural sleep. She had returned about an hour from mass, which she attended regularly at the same hour, since her return M. Chapelain had placed her in the magnetic sleep, and she talked with great calmness of the operation to which she was about to submit. Every thing having been arranged for the operation, she undressed herself and sat down upon a chair. M. Chapelain supported the right arm, the left was permitted to hang down by the side of the body. M. Puillow, house-pupil of the hospil of St. Louis, was employed to present the instruments, and to make the ligatures. A first incision commencing at the arm-pits, was continued beyond the tumour as far as the internal surface of the breast. The second commenced at the same point, separated the tumour from beneath, and was continued until it met the first.

The swelled glands were dissected with precaution, on account of their vicinity to the auxilary artery, and the tumour was extirpated. The operation lasted from ten to twelve minutes; during all this time, the patient continued to converse quietly with the operator, and did not exhibit the slightest sign of sensibility. There was no motion of the limbs, or of the features; no change in the respiration, nor in the voice, no acceleration even in the pulse.

The patient continued in the same state of apathetic indifference and impassibility in which she was some minutes before the operation. There was no occasion to hold, but only to support her. by means of an adhesive plaster, and dressed. The patient was put A ligature was applied to the internal thoracic artery, which was open during the extraction of the glands, the wound was united to bed while still in a state of somnambulism, in which she was left for forty-eight hours: an hour after the operation, there appeared a slight hemorrhage, which was attended with no consequence. The first dressing was taken off on the following Tuesday, the 14th,—the wound was cleaned and dressed anew—the patient exhibited no sensibility nor pair—the pulse preserved its usual rate, after this dressing. M. Chapelain awakened the patient, whose somnambulic sleep had continued for an hour previous to the operation, that is to say, for two days. This lady did not appear to have any idea, any feeling, of what had passed in the interval; but upon being informed of the operation, and seeing her children around her, she expressed a very lively emotion, which the magnetiser checked by immediately setting her asleep.

ON THE TREATMENT OF *HYPERTROPHY*, OR ENLARGEMENT OF THE HEART.

Dr. Elliotson.

A case was presented of hypertrophy of the heart, of which I ought to have spoken at the last lecture, but I had not time. The symptoms were violent palpitation of the heart,—violent action of the heart; that organ struck strongly against the ribs. The pulse was strong, firm, and sharp, and there was also pain in the region of the heart. This occurred in a boy, and it is a common affection in children—boys, girls, and young adults. In them it is almost always of an inflammatory character, and for the most part it is unconnected with any affection of the lungs. In the great number of cases among them, it is connected with rheumatism. It has occurred during or subsequent to an attack of that affection.

With regard to the symptoms of hypertrophy, the patient tells you, that he has pain in his heart, that it beats violently against the chest if he walk very fast, so as to get out of breath, and that he does not lie so well on the left side as on the right; and on listening you find that the heart gives a strong stroke to the stethoscope, and in the situation of the left ventricle perhaps raises up your head. If the

case be very severe you find the action at the sternum, and to a great extent on the left side, both high up and low down. In general there is no preternatural sound—nothing but a very strong impulse. If the heart be dilated at the same time, you generally have a preternatural sound. But, in general, you simply have a strong stroke of the heart in the situation of the left ventricle, or in its acquired region—that is to say, in the whole of the part to which the left ventricle extends. The heart generally becomes rather more bulky than usual, but not much so unless it is dilated. If it be dilated at the same time, you find a dead sound to a much greater extent than usual, but usually the sound on percussion over the heart is not very extensive.

Treatment.—The treatment is that of chronic inflammation, keeping the patient still, and keeping him on low diet, and taking blood from the system, or from the region of the heart, from time to time. I think I have found local bleeding, either by cupping or leeches, answer the best. I think it relieves the patient more than general bleeding. If there be much pain, and decided marks of inflammation, it may be well to get the mouth slightly tender. Calomel is a very good medicine given regularly every day in sufficient doses not to purge violently nor to gripe, but just to keep an open state of the bowels; and if you lower the pulse with digitalis (and there can be no impropriety in its exhibition), under this treatment a great many patients will recover. This boy did so remarkably well, that he would not stay in the hospital any longer. The treatment in his case consisted in applying twelve leeches over the heart every other day for a considerable time, and when he went out, his only symptom was that the pulsation of the heart was rather stronger than natural. The boy finding himself well, wished to go home, and was therefore presented. He was sixteen years of age, and had been accustomed to carry heavy loads. Usually the complaint at that age arises from rheumatism; but when it does not, then it is generally from carrying heavy loads, or having run very quickly—a great deal too much for their years. His disease has clearly been inflammatory. From the first he was attacked with cold shivering, which was succeeded by acute pain in the region of the heart. He was admitted on the 13th of September, labouring under dyspnœa and palpitation. I see that he was first bled to eight ounces, and then calomel was given him, after which the leeches were applied every other day for a length of time, and very successfully.

PORSON'S SKULL.

When Porson was dead, they opened his head, and discovered his skull to be terribly thick. On asking Gall, the phrenologist, how he could account for Porson's possessing a retentive memory, he said nothing was more easy; for having once got a thing into his head, with such a skull, he could hardly fail of retaining it.

THE NEEDLE-POINTER.

An emaciated, lantern-jawed, pale, shrivelled specimen of devoted industry, came into my consulting-room like a shadow—a short, hacking cough shook his feeble frame, and with uplifted, beseeching eyes, he seemed to say, "Pardon me, sir, the liberty I take."

"Poor fellow," said I, "make yourself at home—don't be uneasy, I can wait your recovery from that paroxysm of coughing."

"Thank you, doctor; it is dreadful, and I fear it will be the death of me. I am an altered man, but I hope to see better days. I don't think it is all over with me, do you, doctor?"

Answering his imploring look with one of sympathy, I proceeded to ask his trade.

"A needle-pointer," said he, with a dubious look, as I started at the name, just as if he might have presented to me his death warrant.

"A needle-pointer," exclaimed I. "And pray what you expect me to do for you?"

"It is always the way with you, doctors, I see. You all think our trade is fatal, and so it is to many; but they are weak ones."

"Have you any benefit societies amongst you, like other trades?"

"Yes; but we are not so numerous."

"Do you get admitted amongst the odd-fellows?"

"Why, sir, there is a strong objection to us on account of—on account of—a silly objection—a silly objection, sir, to our trade."

"You think so; poor fellow, I have no doubt. It is lamentable that the worst trades—the most fatal and destructive we know, should be afflicted with a disease the most deceptive and blinding of all others."

"It is not so bad as soldering, sir; and I know many who are living now above forty."

"I rather doubt it: but come to the point, for which you called, sir, your symptoms and disease."

"The symptoms, sir, are those of what is called consumption, although I do not believe it."

"I dare say not."

"I have a severe pain at times in the breast and side; I sweat at night; I have gone thinner, too; I cough a good deal."

"Principally in the morning?"

"Yes; chiefly at that time. I have much oppression in the chest, and you can see how thin I am."

"Does the spittle sink in water?"

"It does, sir. My appetite is bad, and my mind much weaker than it used to be. I feel a terrible sinking in the constitution, as if all my strength was going together."

"No doubt: no doubt. But what do you wish me to do for you?"

"Cure me, sir—cure me; and if there is anything—"

"My good fellow, you must cure yourself. The evil belongs to your trade. You grind steel, and the fine powder you then breathe, that, of course, you must be aware is carried into the lungs, and falling upon the tender membrane that lines the lungs, it irritates, inflames, and then ulcerates them. Why not use a magnet to prevent the metal from entering the lungs?"

"Oh, we don't like; it would be womanish. People would laugh at us."

"The genuine English spirit, no doubt; but it leads to the ruin of your health, and the destruction of thousands. You are bound, for the sake of your family, to use some preventative, and none can answer better than a magnet to attract the metal. Without that you will perish piecemeal, and I strongly recommend the trial. It is the only thing that will re-establish the character of your trade in health, and without it no insurance-office would receive your names —your trade is one that immolates thousands. It is the juggernaut of industry, beneath whose wheels so many fathers, brothers, and husbands are anuually crushed. The disease is in the trade, and no physic can heal it!"

FRENCH FEVER RECIPE.

A FRIEND writes from Paris, stating that the following remedy has cured at least twelve persons to his knowledge, and has been found so very efficient that with a philanthropic view he distributes it for general use. The combination we think good; and the Peruvian bark is well known to be eminently useful in febrile affections, provided the protection-seeking druggists would have the honesty to sell the real article and not an adulterated one. But we presume profit will always prevail over honesty. Take of Peruvian bark, thirty grains; best rhubarb, four ditto; salt of absynth, two ditto; salt of little centaury, two ditto; cream of tartar, two ditto; syrup of buckthorn, sixteen ditto; syrup of absynth, as much as will make a mass.

Divide into four parts: one of the parts or doses must be given to the patient after the *access* of the fever *cold*, or *hot*, is over, in half a glassful of old wine.

The second and third doses in the same manner after an interval between each of twelve hours. Whilst taking this remedy, abstain from all others, and drink weak soup, gruel, or herb tea. A cupful should be taken a little hot, after the dose, and continued every two hours. Beer, and all liquors, except wine, must be avoided, and that only taken in very limited quantities. The diet must be very simple. This remedy scarcely gripes at all, but purges gently. This recipe was discovered in some old family papers, bearing date, 1723, and was distributed by a person called Sauten, at Lyons.

INFUSIONS.

By "infusion" is meant a process which consists in pouring water of any required degree of temperature on such substances as have a loose texture, such as thin barks, leaves, flowers, seeds, &c. The following, then, are infusions; all of which require the water at the boiling heat.

Camomile Tea.—Camomile flowers, half an ounce to a pint of water; emetic while warm; stomachic when cold: also used with poppy heads, as a fomentation, &c.

Compound Infusion of Orange Peel.—Dried orange peel, four ounces; fresh lemon peel, half an ounce; cloves, two drachms; to half a pint of boiling water. Stomachic; dose, two ounces every two hours.

Linseed Tea.—Linseed, one ounce; liquorice-root, four drachms; boiling water, two pints. Let it stand for two hours near the fire, in a covered vessel, and strain.

Infusion of Peruvian Bark.—Take of the lance-leaved Peruvian bark, one ounce; barley-water, one pint: pour the water over both, and let them stand for two hours: dose, half an ounce to half a pint. Tonic.

Infusion of Senna. Senna Tea.—Senna leaves, one ounce and a half; ginger root, dried, one drachm; boiling water, one pint. Purgative; dose, four ounces to six; but generally given as a vehicle for Epsom salts and other medicines.

Infusion of Tamarinds with Senna. — Tamarinds, one ounce; senna, two drachms; coriander seed, half a drachm; brown sugar, one ounce; boiling water, one pint. Laxative; from two to six ounces.

Infusion of Roses.—Petals of red roses, six drachms: spirit of vitriol, three drachms; white sugar, one ounce and a half; boiling water, two pints and a half; lump sugar, one ounce and a half. Mostly used as a vehicle for Epsom salts, whose taste it covers very well; it is also gently astringent.

Infusion of Quassia.—A scruple of the wood to one pint of boiling water.

Compound Infusion of Mint.—Dried mint leaves, two drachms; boiling water, enough to stain six ounces. When cold, add lump sugar, two drachms; and oil of mint, three drops. The simple infusion of mint is made by pouring boiling water over any quantity of the leaves without any other addition.

Infusion of Rhubarb.—Rhubarb, one drachm; water, half a pint: four ounces of which, with neutral salts, two drachms to half an ounce, may be taken as a stimulative purgative.

CONSUMPTION.

PREVENTION OF.

When the disease is fairly established, the great aim must be to subdue inflammation in the lungs and air passages. Sometimes when there are stitches present in the side, bleeding is necessary; but caution must be exercised in so doing, not more than four or five ounces being required. The best plan is to blister or cup first, and see what these will do. A good sign of inflammation being present is, when the blood is puffed up and frothy—the whole being raised in the centre or buffed, as it is termed. The diet must be kept low during inflammatory symptoms, more especially if there is spitting or coughing up of blood.

In regard to the diet the system must be upheld, and no fear need be entertained of administering ale or animal food. Wine we do not so much approve of. Some object to these remedies, but it should be remembered that the patient is discharging much by sweating, spitting, and coughing, and therefore requires support. The chief object should be to avoid anything very stimulating in food or drink, and should much irritability exist, a little opium will subdue it. Tonics, such as infusion of quassia, are sometimes useful during the absence of inflammation. Sulphate of iron is also a good thing to administer as a strengthener to the stomach, which may be exchanged for the carbonate if too much purging ensue. Two or three grains will be sufficient for a dose—spunging the body with vinegar and water has been recommended—and, in our opinion, very properly, as it will have a tendency to check the perspirations produced by the hectic fever that attends consumption. The vinegar and water may be advantageously heated, as some persons cannot endure the cold application. If a gradual change of warm to cold bathing can be borne it will be all the better for the patient, whose sensations however should be closely consulted.

The irritability of the lungs may be much diminished by inhaling the steam from a jug of hot water. We have sea chlorine gas, effect much good during irritability of the mucous lining of the air passages. The fluid chloride of lime should be placed—say a tablespoonful in a glass flask—the flask being sunk in boiling water, and the patient's head placed over the mouth. The patient should inhale the fumes during the space of at least a quarter of an hour. A great deal depends on the quantity of the chlorine and the irritability of the lungs. If there is much coughing the chlorine must be lessened in quantity by the addition of water, and even only a few drops added to a wineglassful. The fumes of burning tar are also found to be beneficial, as well as the odour of tan pits. Consumptive patients are subject not only to sweating, but also to excessive purging. We have pointed out warm vinegar from the first, and in regard to the second affliction we have to recommend fomentations, poultices, sulphate of copper and opium. Hydrocyanic

acid will subdue the sickness caused by the copper. In fact the truth must be told, that few, if any, remedies are to be relied upon; the great aim being to assist nature as much as possible in maintaining the strength, subduing irritation, and lessening the more urgent symptoms.

CURE.

Although nothing, save change of climate, occupation, &c., such as we have stated, can effect the removal of this complaint; still there are many instances in which much benefit has been done, and a complete cure sometimes effected. It has been recommended by some to sponge the breast and neck with the following mixture. A wineglassful of water, a teacupful of vinegar, a tablespoonful of rum. Great exercise must be taken; and, of course, animal food used in preference to all others. Animal food should be taken at breakfast, and malt liquor at dinner. Sea-bathing, also, should be resorted to. Of late years, it has been proposed to admit air to the chest, and thus secure one of the lungs in a state of rest; their constant motion preventing the possibility of a cure. Dr. Curson, of Liverpool, is one of those who approve of this method; but we have not learned how far he has been successful. We have tried chlorine, and have considerable confidence in it; also tar; but we must candidly admit, that nothing short of change of climate, say, to Madeira, can possibly cure consumption; unless it be in the trades of a butcher or tanner, neither of which are at all liable to the disease. We have known persons who removed to warmer climates, recover entirely; and, after a time, return: but they were scarcely in the channel when the symptoms reappeared, and they were compelled to face about, and retreat once more into a more genial climate. How many thousands are there, however, who cannot find the means of retreating from the pursuit of this inexorable enemy of mankind. These unfortunate victims must try our recommendations of the animal diet, change of trade, great exercise, sponging the body with vinegar and water, or muriatic acid and water, early rising, regularity of life, and strict observance of those rules we have pointed out in this lengthy article. With these remarks we must forsake the subject, and refer to others, having devoted space enough to do it full justice.

HUNTER'S PUN.

The celebrated John Hunter is said to have made but one pun in his life, and that was when lecturing in Windmill-street, on the jawbone, which he observed was known to abound in proportion to the want of brains. Some students at the time were talking instead of attending, which made Mr. Hunter say, "Gentlemen, let me have more intellect and less jaw."

OF THE EPILEPSY, OR FALLING SICKNESS.

The epilepsy is a sudden deprivation of all the senses, wherein the patient falls suddenly down, and is affected with violent convulsive motions. Children, especially those who are delicately brought up, are most subject to it. It more frequently attacks men than women, and is very difficult to cure. When the epilepsy attacks children, there is reason to hope it may go off about the time of puberty.

Causes.—The epilepsy is sometimes hereditary. It may likewise proceed from blows, bruises, or wounds on the head; of water, blood, or serous humours on the brain; a polypus; tumours or concretions within the skull; excessive drinking; intense study; excess of venery; worms; teething; suppression of customary evacuation; too great emptiness or repletion; violent passions or affections of the mind; hysteric affections; contagion received into the body, as the infection of the small-pox, measles, &c.

Symptoms.—An epileptic fit is generally preceded by unusual weariness; pain of the head; dullness, giddiness; noise in the ears; dimness of sight; palpitation of the heart; disturbed sleep; difficult breathing; the bowels inflated with wind: the urine in great quantity, but thin; the complection pale; the extremities cold; and the patient often feels, as it were, a stream of cold air ascending towards his head.

In the fit, the patient generally makes an unusual noise; his thumbs are drawn in towards the palms of the hands; his eyes are distorted! he starts, and foams at the mouth; his extremities are bent or twisted various ways; he often discharges his seed, urine, and fæces, involuntarily; and is quite destitute of all sense and reason. After the fit is over, his senses gradually return, and he complains of a kind of stupor, weariness, and pain in the head: but has no remembrance of what happened to him during the fit.

Regimen.—Epileptic patients ought, if possible, to breathe a pure and free air. Their diet should be light, but nourishing. They ought to drink nothing strong, to avoid swine's flesh, water-fowl, and likewise all windy and oily vegetables, as cabbage, nuts, &c. Exercise is likewise of great use; but the patient must be careful to avoid all extremes either of heat or cold; all dangerous situations, as standing upon precipices, riding, deep waters, and such-like.

Medicine.—The intentions of cure must vary according to the case of the disease. If the patient be of a sanguine temperament, and there be reason to fear an obstruction in the brain, bleeding and other evacuations will be necessary. When the disease is occasioned by the stoppage of customary evacuations, these, if possible, must be restored; if this cannot be done, others may be substituted in their place, as issues or setons. When there is reason to believe

that the disease proceeds from worms, assafœtida and proper medicines must be used to kill or carry them off. When it proceeds from teething, the body should be kept open by emollient clysters, the feet frequently bathed in warm water, and, if the fits prove obstinate, a blistering-plaster may be put between the shoulders. The same method is to be followed when the fits precede the eruption of the small-pox or measles, &c.

When the disease is hereditary, or proceeds from a wrong formation of the brain, a cure is not to be expected. When it is owing to a debility, or too great an irritability of the nervous system, such medicines as tend to brace and strengthen the nerves may be used, as the Peruvian bark and iron; or the anti-epileptic electuaries, recommended by Fuller and Mead.

The flowers of zinc in obstinate epileptic cases deserve trial. The dose is from one to three or four grains, which may be either taken in pills or a bolus, as the patient inclines. The best method is to begin with a single grain four or five times a day; and gradually to increase the dose as far as the patient can bear it. Half a drachm to a drachm of cardamine-flowers, or ladies smock, given thrice a day, is sometimes of use.

Musk also has sometimes been found to succeed in the epilepsy; ten or twelve grains, with the same quantity of red sulphuretted quicksilver, made up into a bolus, and taken every night and morning.

Convulsion-fits proceed from the same causes, and must be treated in the same manner as the epilepsy.

There is one particular species of convulsion-fits which commonly goes by the name of St. Vitus's Dance, wherein the patient is agitated with strange motions and gesticulations, which by the common people are generally believed to be the effect of witchcraft. Bleed, if the patient is plethoric; in almost all cases the patient should be repeatedly purged with pill of aloes with colocynth; and afterwards using the medicines prescribed above for the epilepsy, viz. the Peruvian bark and snake-root, &c. Chalybeate waters are found to be beneficial in this case. The cold-bath is likewise of singular service, and ought never to be neglected when the patient can bear it.

NEW MODE OF DOCTORING.

Two living physicians residing not very far from *Saville-row* were once paying a visit at a celebrated sporting duke's mansion. Being out on a shooting excursion, they missed every shot for some time. The gamekeeper requested leave to follow the last covey now on the wing, adding, "for I will soon *doctor them*." "What do you mean, fellow," said Dr. ——, "by doctoring them?" "Why kill them to be sure," replied the impetuous rustic.

ANECDOTES.

EARLY RISERS.

Among eminent early risers might have been mentioned Frederick the Great, king of Prussia, who having found himself otherwise incapable of overcoming his natural repugnance to get out of bed, ordered one of his domestics to rouse him every morning at four o'clock, and to apply a wet towel to his face, if necessary, to enforce his getting up,—on pain, in case of neglecting this duty, of being condemned to serve as a private soldier—for life. This expedient completely succeeded, and the practice of rising early soon acquired the force of a habit, to which the extraordinary exploits of this most eminent person may, in a great measure, be attributed.

DR. MAGRATH.

THE late Dr. M. being called to visit a sick man, asked him, as he entered the room, "How he did?" "Oh, doctor," replied the man, in a plaintive tone, "I am dead." The doctor went immediately and reported in the neighbourhood that the man was dead. The report was at first believed, and circulated; but as soon as the mistake was discovered, the doctor was asked why he had propagated a false report. He replied, "I did it on the best authority; for I had it from the man's own mouth."

Dr. C——, of Liverpool, was called in to see the Duchess of ——, at midnight. The Doctor being seldom sober after four o'clock, was consequently pretty considerably worse at that hour. Stumbling at the bedside, when attempting to feel her pulse, he muttered, "Drunk, by heaven!" and abruptly left the room. Next morning he received a note, including a check for fifty pounds, in which he was earnestly entreated not to divulge the *weakness of the Duchess!*

FOR LOOSENESS OF THE BOWELS.

Prepared chalk one drachm, tincture of kino two drachms, water six ounces. Make into a mixture. This may be given to an adult in the dose of two tablespoonfuls two or three times a day, when the looseness does not depend on inflammation.

ASTHMATIC MIXTURE.

Ether tincture of bladder-podded lobelia half an ounce, camphorated julep six ounces. Mix.—Two tablespoonfuls to be taken two or three times a day for chronic difficulty of breathing, and spasmodic asthma.

For spasmodic asthma, particularly when attended with flatulence, oppression of the chest, and increased susceptibility of the nervous system, this is a most valuable mixture, the first dose generally affording immediate relief.

INVALID'S CORNER.

"Amusement is conducive to the Restoration of Health."

THE POISONER.

(*Concluded from page* 175.)

NEAR the houses which formed the arm of the Quay Pelletier and the Place de Greve, another scene was enacted. The crowd pressed around a woman about forty years of age, who excited compassion in some, disgust in others. She was the chamber-maid of the accused. She spoke fluently, and recounted the marchioness's life in Prison.

"Ah! If you knew how much my poor mistress suffered—"

"Repeat it to us," cried they, in husky voices.

"As I have not left her a moment I can inform you of all that has ensued since M. Piret came to prepare her for death. He is a worthy man, that M. Piret; he has often said to me and the attendants, that he wished he was in her place."

"He must be a good one!" grumbled one of the auditors.

"I need not tell you that my mistress lodged in Montgomery's Tower: the chamber formerly belonged to a poet called Theophile; and still there are verses on the wall written by him. Unfortunate poet! To return to my mistress when she returned after the defence of M. Nivelle, she seemed to have lost all hope. However, whether from fatigue or despair, she fell asleep and never awoke until next day, at the sound of M. Piret's and the priest's footsteps. On seeing them she guessed what was the matter, but her courage did not leave her—she seemed calm and serene. The confessor took her aside, and they prayed together several hours. After a long silence we heard Piret distinctly say to the marchioness: 'Madame, I do not believe you guilty.' However, I ought to know the truth from your own mouth. Make me your confessor."

"But, Father," asked she, with grief, "will my sins be forgiven?"

The confessor nodding; she added,

"In that case, I can receive the viatecum."

"No, madam. If you are condemned—a circumstance of which I am ignorant—the communion will be interdicted. You must understand, that in future the condemned can neither confess nor receive absolution."

"How?"

"Do not despair. If the Parliament declares you innocent—"

"Innocent, Father; I no longer hope for it."

She then cried, and threw herself on her knees with great devotion. Then she spoke so low, we could not hear her conversation with the priest. Doctor Piret retired, giving her some hope; and returned next day with the physician of the prison to attend her to the torture chamber. It is a frightful thing that punishing by torture—and men must be cruel to order it in cold blood. The marchioness submitted to it with remarkable courage. They dislo-

cated her limbs, they broke her bones, squeezed her feet to a mummy, and pinched her with red-hot irons. Returning to her chamber, pale, suffering, and disfigured, she said to her confessor, in a dying voice,

"Father, this has been a long and horrible trial. I am dying—am I not? Prepare me to appear before the throne of God!"

I wished to proceed to her, but I perceived the executioner. He came slowly up, followed by two assistants, and pausing before my mistress, he said, in a loud voice,

"Follow me, madame." In spite of her feebleness she crawled to the chapel. Doctor Piret chaunted a prayer, and gave her absolution. This ceremony over, the marchioness was led into the chamber of the accused. Then I could not retain my tears on hearing judgment given, and on seeing her clothed in a chemise plaistered over with sulphur. The executioner bound her hands, and placing a light between her fingers they made her mount a dirty tumbril. The sad spectacle traversed the Place Notre Dame, amidst an enraged mob, ready at any moment to throw themselves on the accused. I heard M. Piret, on arriving at the Place, say,

"Here, madame, you must beg pardon. The ceremony consists in falling on your knees, and making a public avowal of your crimes, asking pardon of God for the same." At this moment the archers dispersed the crowd, and formed a hedge. The marchioness was placed between the minister of justice and the man of God, between the executioner and priest, and proceeded towards Notre Dame. The great gates of the church were opened. The twilight illuminated the doleful scene; black cloth was extended and candles burning. The clergy sang their hymns for the dead, and all became silent as the grave.

My mistress on her knees at the door, heard the sentence of death without a gesture or a sigh. In a feeble and broken voice, she said—

"I admit that I wickedly, and through vengeance, poisoned my father and two brothers, to receive their property, for which I ask pardon of God, the king, and justice!"

She ascended the tumbril, and proceeded towards the Place de Greve—whilst the celebrated Painter Le Brun placed near the Hotel Dieu, sketched the pale face of my poor mistress. The women around began to let themselves loose in observations and commentaries, when a man, enveloped in a mantle, approached the chamber-maid, seized her by the arm, and pulling her aside, said in a low voice, and with an Italian accent,

"Did the marchioness never, when in prison, speak of a person called St. Croix?"

"Yes, sir, very often." Then reflecting, she hastened to add—

"Why put such a question?"

The unknown looked at her with a saddened air, removed from her, and proceeded up the Place.

At that moment the tumbril passed the bridge Notre Dame, went

through the crowd, and stopped at the Place de Greve, near to a scaffold erected in front of the Town Hall. The accused ascended firmly, kneeled on the plank, and heard again the sentence read. The executioner approached her, undid her hair, cut it off, and slit up her clothes. All at once cries were heard. The mendicants advanced armed towards the scaffold, furiously exclaiming—

"Pardon for the accused! Death to La Regnie. The archers were beaten and dispersed. A man, armed with an axe, alone assailed those who surrounded the scaffold. The crowd dispersed, and the beggars performed prodigies of valour. La Regnie who foresaw this emente, and who awaited it at the Town Hall sent word to the archers to surround the Place, and fire on the mutineers.

The Aid however overthrew all who opposed him. He was about to seize the marchioness when he was transfixed with a sword. A nun who had advanced on the Place, and who had been gazing sometime on the scaffold, received this man in her arms.

"Pailo Exilo," cried she, with emotion.

"Sister Marie," said he, collecting all his strength, "I wished to revenge my brother, and save from infamy the name of the sister of my benefactor—" He could not conclude, and gave up his last sigh.

"May the will of God be done," repeated the nun, fervently. At the same moment a heavy sound was heard near her; and on lifting her eyes she saw a head detached from a body, which the executioner threw into the flames. She screamed and fainted. The next day says Madame de Sevigne in her letters, the Marchioness de Brinvilliers was regarded as a saint, and her ashes were religiously gathered up by the people. EUGENE BARESTE.

TO CORRESPONDENTS.

Humphrey Beecroft.—Will see that we have commenced the directions for preparing medicines. The calomel and chalk may be had of any druggist. It is by all means best to buy the preparation.

Charters.—Rub the loins every night and morning with hartshorn and soap lineament, equal parts; drink plenty of linseed tea in which sweet spirits of nitre are mixed, one drachm to a pint.

A Young Man.—Use the shower-bath as often as possible, and do not be alarmed; such things are natural.

Spes.—Use the same remedy, and keep your promise. Try once a week. Pul. Opii. gr. ¼ pil. Hydrg. gr. iij. make into one pill.

L. L. Westbromwich.—Try a blister, and use the following pill twice a week: pil. hydrg. gr. iij. ex. colocynth. gr. iii. make into a pill.

S. J.—Same prescription as *Smithfield, No.* 11.

Correspondent.—Wash the parts night and morning with soap and water—syrup of squills two drachms, mucilage one ounce, camphorated water six ounces—make a mixture; a teaspoonful every three hours.

An Invalid.—Pulv. opii. a quarter of a grain, extract of Hyoscim one-eighth of a grain, Pil. Hydrg. three grains—make into a pill. Twice a week.

A. B. C., Barnstable.—Seat worms. Try an injection of olive oil.

Inquirer.—Take more exercise; lay aside the pipe, and try pulv. gamboge a quarter of a grain, extract of colocynth three grains, pulv. aloes two grains, —one pill when necessary.

J. Wright, Leith.—His case seems one of rheumatism. Let him study our article on that complaint, and write again.

H. W. B., Manchester.—Must attend to diet, exercise, and his bowels, and not be afraid; the common rhubarb pills will answer him, two for a dose night and morning twice a week, also a wine-glassful of infusion of quassia (see this number) every day at noon.

Constant Sufferer, Newcastle.—Go on, and take the colocynth pills, thrice a week, two at night, and one in the morning.

Delta, Manchester.—His case can only be treated privately.

Julia—Pluck them out, and use some common cerate ointment afterwards.

B. Marshall, Rochdale.—Carbonate of iron, 15 grains, twice a day, to be increased to three times. Keep the bowels open.

A. T. Gray, Edinburgh.—Impossible to make it better. Write to the Printer.

Josephine.—Has the cure in her own hands, by avoiding the cause of the complaint; try sea-bathing, the shower-bath, and spunging the body with warm vinegar and water at proper periods. Keep the bowels regular.

William, Liverpool.—Direct a stream of water upon the knees every morning; go to the pump if possible, and rub well after with a hard cloth.

William Simpkins, London.—Wash with brown soap, and then rub with blue ointment for a few days. Write more explictly.

John Wilson, Sunderland.—Give up the copper, and write his case fully.

J. V. Chariety, Leeds.—Extract of colocynth, four grains, Pil. Hydrarg. two grains, make one pill; twice a week. Try carbonate of soda, or a seidlitz powder occasionally

Magdalen.—Spunge the body with hot vinegar and water, every day. Pulv. opii. quarter of a grain, Pil. Hydrarg. three grains, one pill, twice a week for a fortnight or three weeks. Strong acetic acid will remove the warts.

J. S. Preston.—Look to the bowels strictly. Try one or two pills, such as for *Inquirer.* and write again.

Conrad.—We will make inquiries, but fear it will not be of much use, as time is the best doctor.

L. S. M.—Use olive oil as an injection for worms; bathe the swelled ancle in hot salt water.

W. X. Somer's-town.—It is no doubt the mercury. Use the infusion of sarsaparilla.

H. H.—Try a blister at the back of the neck, and the syringe also for the ears.

Recommender, Nottingham.—Look to your own habits, and be regular. Take extract of colocynth three grains, Pil. Hydrg. three grains—one pill, twice a week.

Constant Subscriber, Smithfield.—See *Smithfield, No.* 11.

Adonis, Bristol.—Regularity in habits. A tablespoonful of infusion of gentian—thrice a day. Keep the bowels regular, and take plenty of exercise.

NOTICE.

Many letters were forwarded by mistake to Mr. Johnston, and as we live at least four miles from his house, hence the delay in the replies. *The private correspondence has been duly answered.* Any of our subscribers who wish their medicines forwarded by post, can have them supplied genuine in that manner, and cheaper (including postage) than they can possibly procure them; of course the post will not carry bottles. We aim at genuineness and cheapness in making this proposal in answer to several correspondents.

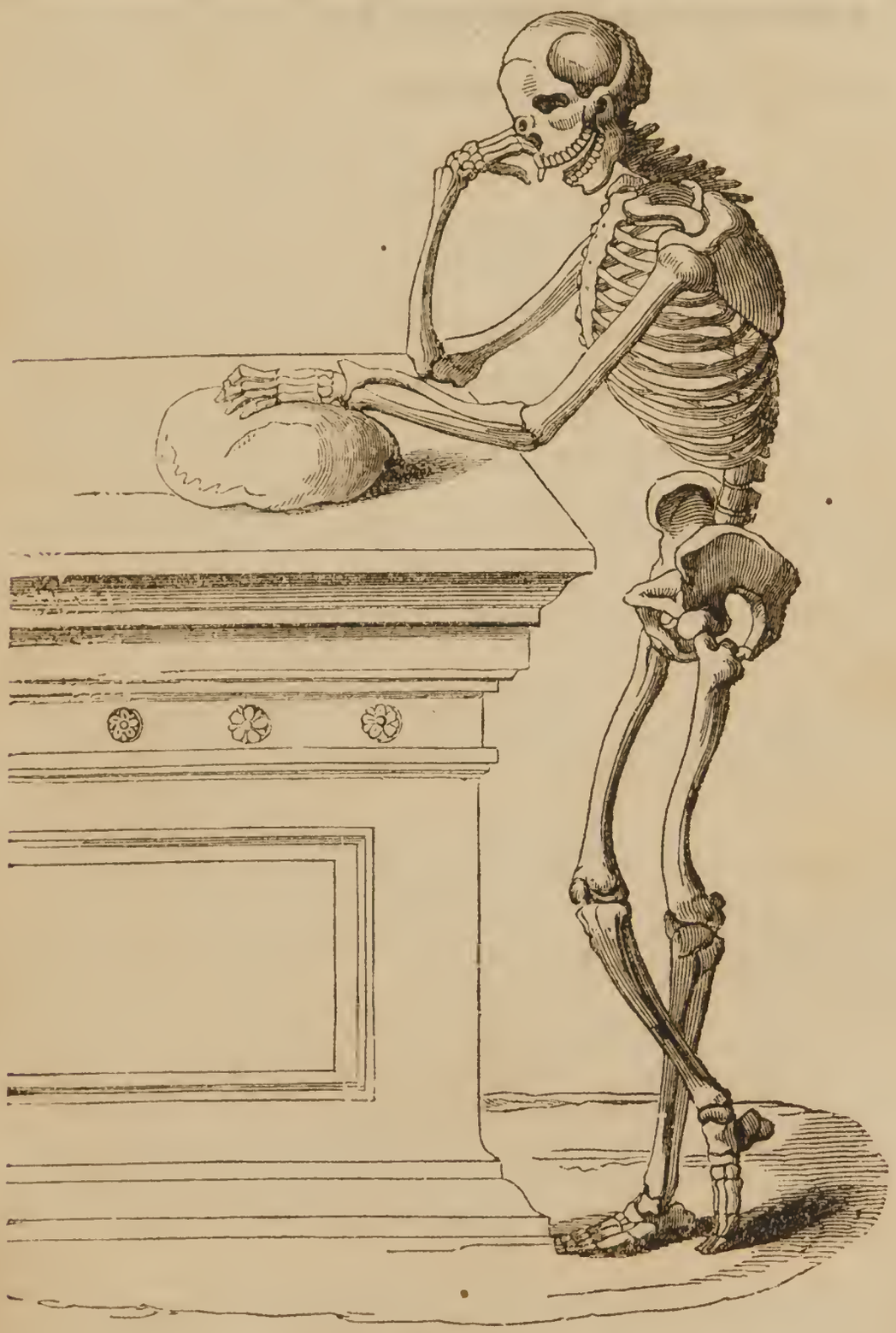
N.B. Medical Advice will always be given to any person (gratuitously) through the pages of the FAMILY DOCTOR; but it is necessary to give age, sex, employment, symptoms of disease, length of its duration, together with the most probable cause, or at least to describe the commencement of the attack. Any one may have advice through the above medium—viz., *answers to correspondents*, without the necessity of giving their names, or the possibility of their being made known; only, there may be questions which we shall decline answering in our pages, in which cases the patient may correspond with the editor, receiving advice until cured, on payment of 2s. 6d., as a fee, in the outset. In all cases direct to the Editor of the FAMILY DOCTOR, 4, York Cottages, St. Mark's-road, Camberwell New-road, London.

THE

FAMILY DOCTOR.

ILLUSTRATED.

No. 13.] AUGUST 30, 1845. [PRICE 1½*d*.



THE SKELETON.

WE have, to make up for disappointment, presented the reader with a superior and more expensive drawing of the human skeleton. The bones we have already described as belonging to the head and spine. There only remains for us to describe the bones of the upper and

lower extremities. The shoulder is composed of the *scapula* at the back part, and the *clavicle* in front,—the arm is composed of the *humerus*, the fore-arm of the radius and ulna, and the hand of the *carpus* and *metacarpus* bones.

The lower extremity is divided into haunch, thigh, leg, and foot; and the foot again into tarus, metatarsus, and toes; the thigh bone is called *os femoris*. The bones of the leg are two, viz. the *tibia* and *fibula*, and the patella or knee-cap. We must, next week, proceed to the consideration of the joints, &c.

STRENGTHENING PLASTER.

Take of diachylon two ounces, galbanum two drachms, carbonate of iron three drachms. To be mixed by a gentle heat, and spread on leather.

THE DRUNKARD.

Being disengaged, I had just taken up the anatomy of drunkenness, when the door opened, and a half-awake, shaking, nervous-looking being walked in.

"I say, Doctor, can you do anything for me? I'm sewed up, I tell you."

"Tell me what you have to complain of, and don't make a roundabout of it."

"Oh, Lord! It would take me a month to tell you all I complain of."

"What sort of appetite have you?"

"Very poor, Doctor—very poor. I never eat anything to speak of until late in the day. I come in for supper."

"By your appearance, I should judge you were a drinker."

"Lord bless you, sir; I drink very little."

"Do you take anything in the morning?"

"Oh! aye. I have my morning always."

"And your meridian too?"

"Certainly. I noon it, like my neighbours."

"Well, after that?"

"Why, I have my afternoon, and in the evening I sit down to it."

"Exactly; and don't get up until you are fetched?"

"As seldom as possible."

"How much may you drink in a day?"

"Morning, glass of gin and bitters; noon, pint of porter; dinner, a quart; afternoon, gin and beer, a mixture; evening, gin."

"How much?"

"Don't know: perhaps half a dozen glasses."

"Well. What do you complain of?"

"In the morning, nasty taste in my mouth; at night, bad dreams: all shaking at breakfast, and in the morning hardly able to do any business before twelve. Got a stiffener or two to help me through, or couldn't get on at all. My stomach is all out of sorts, and so are the kidneys. I can't sleep without getting half-drunk!"

"Miserable fellow! Are you not wearied out with such torture?"

"No: there is an infatuation in it that leads me on. I am very well at times, but what with indigestion, heartburn, sickness, &c. I have a very poor life of it at times. Can you do anything for me?"

"No, sir; I confess I cannot. You must do it for yourself. Hold less to your head. Have a controul over your hand, your head, and your stomach. Make less of a swill-tub of the latter, and the two others will be steadier and more ready for work. I have no medicine for you; your disease is rooted in your habits; root out these, and the disease goes with them. Good day to you, you have no business here; medicine cannot cure folly."

ON THE DIFFERENT KINDS OF RHEUMATISM.

DR. ELLIOTSON.

THERE was a case of rheumatism of the knee-joint, in a young woman in Mary's Ward; the part was elastic and greatly swollen. I had the iodine well rubbed in, and in the course of a few days she said she was perfectly well. Now I cannot think that iodine would have such a quick effect; and the fact was, as I have since heard, that she wished to go out to see her sweetheart, and went out accordingly. There was another case of rheumatism presented in a man; the pains were relieved by warmth. There is one very useful rule that you may almost always be guided by in rheumatism, and by this you may always tell whether it is inflammatory or not, and that is, whether it is relieved by heat or cold. There are two descriptions of rheumatism, and the treatment of them is very different. If the pains are relieved by cold, and become worse from heat, it is inflammatory; and if increased by cold, and relieved by heat, it is not inflammatory. In the former, antiphlogistic treatment must be had recourse to; and in the latter the treatment must be quite contrary, viz., by exciting warmth by stimulants, and the best that I have found for this is the ammoniated tincture of guaiacum, together with the warm-bath. Rheumatism may be treated in the best manner possible, and frequently will not subside, owing to its being kept up by some exciting cause, which might not be perceived by the medical attendant; the patient may either still be exposed to the weather by living in damp places, or be not sufficiently careful of different temperatures. There are remedies, if not counteracted, that will in general give relief, and frequently fail, owing to some unforeseen cause; the sufferer may be taking diet contrary to his orders, therefore it is always necessary to make minute inquiries. Diet frequently counteracts the effect of our treatment, even in the hospitals; improper food is brought to the sick by their friends, and though I am very strict on this point, yet I find it impossible to prevent its occurrence. For instance, as regards porter, it is supplied in such a bad way, that patients can get it when they please, by merely paying for it. It ought to be given out in the same manner as medicine, that is by a proper officer attached to the hospital. The wine is served out in this way by a very trusty, excellent, steady man, and one who can be depended upon. The porter at present is got from a publican in the neighbourhood, who of course would sell as much as he could of it; and if patients get such remedies as these, of course it is impossible to cure them. Another cause, which often counteracts the effects of our remedies in rheumatism, at least amongst the poor people, is the dampness of the situation in which they live, which is one of the principal exciting causes of the disease, and tends to keep it up. The patient I have just spoken of went out perfectly well.

I next speak of a case of rheumatism occurring in a man in Jacob's Ward, who had been ill two months, and ascribed the origin of the disease to cold. We should always try to ascertain the cause of these affections, since pains, like rheumatism, frequently occur after scarlet fever—after ague, both during the attack, and upon the alternate days of ague. But we generally find rheumatism arise from the simple or combined effects of wet and cold. In this case, there was no particular excitement of the system, the bowels were regular; urine natural; pulse good; and the pains were relieved by warmth. In the hot inflammatory rheumatism, it it necessary to employ the antiphlogistic treatment, that is, general and local bleeding, and application of cold, if it is most agreeable to the feelings of the patient, and the exhibition of colchicum or mercury. In the other sort, or cold rheumatism, the opposite plan of treatment to be adopted, viz., the hot-bath and stimulants, and the ammoniated tincture of guaiacum, as I have before mentioned, I have always found the best remedy; and to repeat it according to circumstances: I find it an excellent medicine in this disease. Sometimes it is difficult to find out to which of these species the disease belongs, and when this is the case, mercury should always be given, for it is equally serviceable in both cold and hot rheumatism. As soon as the mouth becomes sore, the pains decline, but it is still necessary to continue it for some time, in order perfectly to remove the disease; therefore, in doubtful cases, it is best to give mercury, for it will always do good. We frequently find rheumatism in different states at the same time, in different parts of the body, and the parts, differently affected, require a different plan of treatment. In mixed cases, that is, when one part is relieved by heat and the other not, mercury should be given, as it is beneficial both in the cold and hot rheumatism; I generally also have recourse to the warm-bath, which I find useful. In the slightly active rheumatism, and in the cold, I order it to be used at as high a temperature as can well be borne; this acts as a slight stimulating and also a soothing remedy. I never use it in the acute form, for, in moving the patient, it would occasion great pain, and in all probability do mischief. In this case I ordered the warm-bath to be used daily, and gave him two grains of submuriate of mercury every night, and, in the course of three weeks, he left the hospital quite well. You see, that the treatment of rheumatism, owing to attention being paid to this distinction, and using the remedies proper to each, may generally be cured.

In indolent swelling of joints, arising from collection of synovia, or thickening of ligaments, I find the iodine very useful; and in indolent thickening of the joints, I have found arsenic the best internal remedy: this was well illustrated in a little child, who had a chronic enlargement and thickening of the ligaments of the wrist, and by persevering in the use of arsenic, she got much better; she derived but little benefit from it at first, but after continuing it for

a long time, this affection got well, or nearly so, and I think was made an out-patient. You can see at present several patients in this hospital with the different sorts of rheumatism treated according to their symptoms. Colchicum seldom does good, unless it occasions purging; therefore I assist its operation by the addition of the magnesiæ sulphatis. Where colchicum does no good, mercury is generally useful; indeed, I have always found mercury a useful remedy, and superior to colchicum in doubtful cases.

ACADEMY OF SCIENCE.

PARIS.

Meeting of the 18th August.

Medical Science.—M. Dubriel, Professor of Anatomy to the Faculty of Medicine, repeated the following observations, which he had made in the heads of two Nukaiviens, which he had found in a morass. He compared them with Europeans, and the inhabitants of Oceanie, at a great distance from the Marqueses Islands. One of the heads belonged to a person advanced in years, the other to a young woman. What strikes one in the first, is the relative extent of the diameter of the head. The parietal bones are lengthened, the temporal flattened. The brow although high is not broad. There is a strong development near to the organs of benevolence and veneration. The face is long. In short, after examining the whole of the head, that of the Nukaivien resembles the Circassian breed. As for the woman's head, it resembles the most beautiful type of the same race, compared with a Georgian head, it bears out the comparison without much difficulty. The brow is, however, inclined a little backwards. But the face is small, round, and the prominences softened. The figure of the head presents the most graceful contour. The facial angle is short of 80 degrees, which accords with the observations of M. Lebatard, on the *Marqueses Keratoplastie.* Surgeons give this name to an operation, which consists in replacing the diseased cornea of the human eye, by a portion borrowed from another animal. After many trials made with animals, having more or less success, but always without accident, they conceived the idea of applying it to men, when accidental loss or disease deprived them of it. "Since the last five years," said M. Plouvien, "that I have directed my attention to this operation, and after many experiments, I have never obtained perfect transparency. In these cases considered the most fortunate, the new cornea has always remained more or less opaque. However, the sight has been many times established, although it has always been incomplete. Amongst those cases he reported, was a young woman, aged 23, who had been blind from the age of three years, on account of the small pox. He removed the opaque cornea, and applied the cornea of a young dog.

The operation resulted in no accident whatever, but it was to be regretted that it did not perfectly succeed. The sole benefit the young girl received, was that of being able to distinguish day from night, whilst she could not walk alone. However, to believe M. Flourens, there is no need of despair in these new attempts to restore sight. M. — Fieldman has arrived at more satisfactory results, after many experiments of the same kind, and there is a strong hope of ultimate and complete success. If it is so, we shall consider it, as Arago remarked, one of the most precious acquisitions of science.

A He-goat Suckling.—M. Geoffroi Saint Hiliare, reported an anomalous case of a he-goat, presented to the Museum by a person unknown. The goat which presents all the attributes of its sex, is provided besides with teats as much developed as those of a she-goat. The milk which is extracted in abundance, has all the characteristics of milk. It only differs in taste, which is more salt. This animal is not a hermaphrodite, because it has all the developments of a male; anomolous cases of this kind are not without example. Aristotle reports many, and in the annals of science there are instances amongst dogs, cats, monkeys, &c. Several instances have been known amongst men. Humboldt has recorded during his travels, an instance of a man who had breasts so well developed, that during the absence of his wife, he could suckle her child for six months.

Ergot of Rye.—M. Vallot made several observations on natural history, amongst others, on the various kinds of insects which destroyed plants. During a considerable period, it was believed that neither corn or barley were susceptible of being attacked with ergot. The author had, however, presented to the Academy of Design, a stalk of corn, having several of its ears ergotted. He had also the same year presented an ear of barley.

Phenomena of Digestion.—M. Lassaigns communicated new results which had been made apparent from operations on the horse and sheep, to determine the amount of the salivary fluid which food absorbs during mastication. He had in a previous communication shown, that the act of mastication would not exercise any chemical influence on the food itself, according to the results obtained of M. Lassaigne, and arranged in a table, the amount of saliva and mucous fluid absorbed during mastication, stand thus:—on barley, the proportion is for the horse 1,000 to 1,890; in corn, 1,000 to 1,129; in hay, 1,000 to 481. In the sheep, the proportion is 1,000 to 2,125; 1,000 to 937, and 1,000 to 393. We confine ourselves for the moment to the results given, which cannot be well understood, except after repeated experience, to which we shall return.

SYMPTOMS AND TREATMENT OF INFLAMMATION OF THE LUNGS.

This complaint is known by a great load and oppression at the chest, difficulty of breathing; sometimes the patient cannot breathe but in an upright posture; the breath is hot, attended with cough and fever, the face is swelled and of a livid colour. The cough is commonly moist, and the phlegm frequently streaked with blood, the pain not so superficial, nor the pulse so full or hard as in pleurisy, though the difficulty of breathing, anxiety, and oppressive weight are more distressing.

If the urine deposit a white and uniform sediment, it is a favourable symptom, and promises safety to the patient and shortness of the disease; and so does a red sediment, which gradually changes to a white; or turbid urine, depositing a copious sediment; as well as an early appearance and continuance of what is called an erysipelatous blush, or a miliary eruption.

The treatment consists in bleeding, at the commencement, from a large orifice, and to repeat it according to the exigency of the symptoms; but great care and attention are required with regard to this operation; for, if the habit of body be strong, the pulse full, firm and hard, it may be repeated with safety; otherwise great caution is requisite, lest by an unnecessary repetition, we do irrecoverable injury. Leeches or cupping-glasses may be applied over the seat of the pain, and the following purge given at the commencement:—

Take submuriate of mercury, five grains;
Conserve of hips, the same quantity:

Make a pill, to be taken immediately; after which the following draught:—

Epsom salts three drachms;
Senna tea two ounces;
Syrup one drachm.

As it will be necessary to keep the bowels gently open, from time to time, the above draught may be given, either once, twice, or three times, in proportion to the effects it may produce.

To promote expectoration, which should be forwarded by every possible means, and to determine a gentle perspiration to the surface of the body, any of the following may be given; viz.—

Take purified nitre one drachm;
Oxymel of squills three drachms;

Make a mixture, and take a teaspoonful often, or when the cough is troublesome; or,

Oil of almonds, syrup of Tolu, of each one ounce;
Spermaceti, beat up with a solution of gum Arabic, or the yolk of an egg;
Confection of dog roses, or hips, half an ounce:

Mix them up, and let the patient take a little frequently: or,

Antimonial powder one grain and a half to three grains;
Confection of roses ten grains:

Mix for a bolus, to be taken every three hours; or,

James's powder, four grains for a dose.

Bathing the feet every night in warm water will be of service; and, when once expectoration has copiously appeared, caution must be observed in promoting purging, as this, as well as blood-letting, would tend to check it. At this period of the disease, costiveness should be removed by clysters or gentle aperients.

A large blister, as the first proper step, may be applied over the seat of the pain, and, should it show a disposition to heal up soon, a fresh one ought to be applied somewhere in its immediate neighbourhood, so as to keep up a constant effect; a method, in this instance, preferable to keeping up a discharge from the surface of the old blister, by means of stimulating ointments, as is too frequently practised. Blisters may be used in any stage of the disease; and in many cases, where blood-letting cannot be carried far enough, or even not resorted to at all, and in the pleurisies of old people, are very beneficial.

At the commencement of this disease, opiates would evidently be injurious, by interrupting the expectoration, and, therefore, should not be given until previous bleeding and blistering have greatly relieved the pain and difficulty of breathing. In the more advanced stage, where a cough is the only urgent symptom, and proves the principal cause either of the continuance of pain or of the want of sleep, opiates will be highly useful, and may, therefore, be given in the form of a draught, combined with pectoral medicines, to be taken at about bed-time; as in the following form:—

Take solution of acetate of ammonia six drachms;
Mint water two ounces;
Tincture of opium one drachm and a half;
Syrup of Tolu two drachms;
Solution of tartarised antimony half a drachm:

Mix, and take one half at bed-time.

During the whole of the complaint, the patient should be confined to bed, lying with his head and shoulders as much elevated as possible; his chamber kept cool and quiet; and his strength supported with food of a light nutritive nature, such as roasted or boiled apples, panado, &c. His drink should be thin gruel and barley water, sweetened with honey, or a decoction of liquorice root, in which a small portion of currant jelly may be dissolved to give it a pleasant tartness.

The patient, on recovering, should carefully guard against any exposure to cold, or any irregularity which might occasion a relapse; for no inflamation is so apt to recur as that of the lungs, and a return of it might lay the foundation of pulmonary consumption.

AN INTERESTING HISTORY OF THE ORIGIN AND PROGRESS OF INOCULATION.

DR. ELLIOTSON.

Small-pox is communicated artificially by inoculation, because the disease which then arises is much more mild than that which occurs naturally. The effect of inoculation is to lessen the number of pustules, and thus to lessen the general violence of the disease. The effect of vaccination upon the disease, if it do not prevent it altogether, is rather that of lessening its duration. Inoculation produces the disease with a far smaller number of pustules and less general irritation; whereas, if a person have small-pox after vaccination, the disease goes on in the usual way for a certain time, and then all at once the feverishness ceases, and there is rapidly an end to it. It will terminate, in fact, on the sixth day, instead of the eleventh.

It is found also that the disease appears much more quickly when it is communicated by inoculation than when it is communicated naturally. The affection usually appears on the seventh, or at the latest upon the eighth day, when it is communicated by inoculation; whereas, when it occurs by infection, it is generally from the twelfth to the fourteenth day before it appears;—and consequently you may, by inoculation, be beforehand with infection. If a person have been exposed to the infection of small-pox, and has a great chance of having a severe disease, it is right, if you do not vaccinate him, to inoculate him immediately; because you then produce the disease more quickly than it would otherwise occur; the artificial form gets the start of the natural, and the patient has the artificial disease instead of the natural. Dr. Fordyce also mentions, that the quantity of matter applied greatly influences the severity of the disease: he says, that if you introduce only a small quantity of matter, a less severe disease is produced than if a considerable quantity be employed. On this account, the quantity of matter should be as sparing as possible; it should only be just sufficient to produce the disease. In cow-pox, however, a different rule must be observed; because the object in that case, is to have the affection as complete as possible, and therefore a considerable quantity of matter must be introduced; and you must not be contented with making one insertion, but you must make several. I wish you to remember, however, that in small-pox, the object is to have the disease in the mildest way possible, and therefore the smallest possible quantity of matter is to be introduced.

The fact of inoculation rendering the disease milder, appears to have been communicated to the Royal Society of Edinburgh in the eighteenth century, and the knowledge of it to have been brought to England from Constantinople. The knowledge of this fact is said to have existed in China and Hindostan for a great number of years. The Chinese were in the habit of placing the crusts taken

rom small-pox patients in the nose, having first frequently kept them in jars for some years; sometimes they reduced the crusts to powder, and made the children snuff them up;—this was called *sowing the small-pox*. The Brahmins are in the habit of scratching the surface of the skin, and then binding upon the scratch a piece of cotton moistened with the pus. It is said that a particular caste has the charge of this practice. They, however, prepare the patients for this process by some months' abstinence, from even milk and butter—and this would be pretty low diet, they having no animal meat at any time. This mode of inoculation appears to have been long practised in Persia, Armenia, Georgia, and Greece; but its origin is unknown. Some imagine that it arose in the deserts of Arabia, where there were no physicians or priests—nothing but old women, the knowledge of the fact being acquired by the vulgar. However, the practice appears to have been known an immense time in the provinces of Italy, in France, Germany, Sweden, Denmark, and even in Great Britain, among the peasants. In the north of Scotland, the people were in the habit of giving the children the disease by putting them to bed with others labouring under the affection, or tying threads soaked with pus upon their wrists. But although it was known in this way among the lower orders (just as we shall see was the case with regard to the cow-pox preventing small-pox) before the enlightened part of the public were aware of it, the practice came to us ostensibly from Constantinople. Dr. Timoni wrote to Dr. Woodward on the subject from Constantinople, and the letter was published in the "Philosophical Transactions" the year after. Pylarini, a physician, also wrote on the Turkish practice, and sent his communication home in 1715, and this was likewise given to the public in the "Philosophical Transactions." Lady Mary Wortley Montague was at Constantinople with her husband, who had been appointed ambassador to the Ottoman Court, and she there learned the practice, and being a courageous woman, tried it with success on her own son. On her return to England she had her daughter inoculated. Caroline, Princess of Wales, wished to have her children inoculated, but was desirous that the experiment should first be made on six felons in Newgate. She obtained the consent of George the First, and the operation was performed. Five of the felons did well, but the sixth did not take the disease, having in fact previously had it; but, on account of being inoculated, they were all saved from hanging. Inoculation was now thought favourable of in England, and it appears that in the first eight years, 845 persons were inoculated, only seventeen of whom died: at Boston, only one out of 45 died.

Of course, as this was a new practice, it excited opposition. Whether the practice was good or bad, being new, was sufficient to account for this; and many clergymen and dissenting ministers raved against it from the pulpit, and called inoculation the offspring of atheism: those who performed it were called sorcerers, and the whole thing was said to be a diabolical invention of Satan. Others,

however, were of a different opinion, and Bishop Maddox and Dr. Doddridge defended it, and in doing so employed scriptural quotations. You know that the devil can quote Scripture to suit his own purposes, and therefore it was very fair for good men to quote Scripture too. However, the reasonable side of the question at last prevailed.

Then, after a time, the practice was nearly relinquished throughout Europe, just as we saw was the case with regard to the use of Peruvian bark. After the practice of exhibiting bark had been approved, the good opinion formed of it was entirely lost, so that it became a *drug* in the market; and inoculation was almost disused in England from 1730 to 1740, and in France it was absolutely forbidden.

The truth, however, was that inoculation caused a great loss of life: it saved the lives of a great part of those who were inoculated, but it kept up the pestilence to such an extent, that far more caught it than otherwise would have done so, and it increased the general amount of the disease.

With regard, however, to the success of the practice, I may remark that frequently those who were not medical men, were the most successful. Some Carmelitish friars inoculated the Indians of South America very successfully; and the most successful inoculators in every part were non-medical men. A planter, at St. Kitt's, is said to have inoculated 300 of his slaves himself, without having lost one.

Medical men made a great preparation for inoculation by purgatives, emetics, and various drugs, and employed all these things also in the course of the disease. They likewise confined their patients to bed, and kept them in a hot room, with a view to encourage perspiration. This practice aggravated the feverishness, and increased the mortality from the disease. Of course the disease was also kept up by so many being inoculated. Great fury prevailed against it, when in 1754 the London College of Physicians published a declaration in its favour.

Inoculation, however, met but with slender success till the times of a person named Sutton. This quack, however, used purgatives and common-sense treatment, and succeeded wonderfully, so that he spread inoculation more than the College of Physicians and all the doctors together. Sydenham practised free ventilation and refrigerants; but Sutton omitted the opiates which Sydenham was in the habit of giving, and gave calomel and tartar emetic. Sutton also restored the Turkish practice of making only a slight scratch with a lancet. The practice, indeed, fell very much into the hands of quacks. Medical men ceased to have recourse to it, but quacks took it up, and endeavoured to turn a penny by it.

DISEASES OF CHILDREN.—CONVULSIONS.

From the importance which is attached to that frequent and fatal disease termed convulsions, we feel it our duty to dwell upon it in order to give all the consideration which it so justly deserves. We therefore defer our opinions upon that species of the disease which is the most common for the present, and in the meantime, we shall observe upon a less frequent class of that disorder—convulsions in new-born infants. The causes of it are either from pressure upon the head in birth, from a fright which the mother may have received during pregnancy, or from too much susceptibility in the nervous system, on being suddenly exposed to cold. The treatment of this disease is very simple. Let the infant be sponged all over with hot brandy, free the mouth from any fluid contained therein, administer a teaspoonful or two of senna tea, almost thickened with sugar, give an injection of a wineglassful of warm water, with a little oil, and wrap up the infant in unwoven cotton, or such like warm substance; a little blood may also be taken with advantage in the beginning. This is all that should be done, except perhaps a warm bath; but if this is used (and it may be used if the other remedies fail), then especial care should be taken to have the infant dried instantly, and wrapped up warmly after the bath. It is a species of convulsions from which a recovery cannot often be expected.

ON THE SYMPTOMS AND CURE OF JAUNDICE.

DR. ELLIOTSON.

There was a case of jaundice presented which was very interesting, inasmuch as it was such as you will continually have to treat. You will observe that jaundice is an acute, or a subacute, or a chronic affection. When it is acute and comes on suddenly, for the most part it is an inflammatory complaint. A great many cases that you see are nothing more than inflammation of the liver with the incidental symptom of jaundice. I dare say, that a part of the liver is inflamed in the neighbourhood of the ducts. In this case the colour of the skin was of a bright hue. There are various shades in jaundice, and when the yellow is of a bright cast, the prognosis is so far favourable. When the colour is of a greenish yellow, it is more probable that the patient will not get well. When there is a dark green hue, there is usually some disease or other of the liver, and the patient generally dies. This was pointed out by Dr. Baillie, and I believe his observation is correct. This man was 34 years of age, and admitted on the 10th of September, but had been poorly more or less for some months. He was attacked with acute pain at the right part of the epigastrium, accompanied by weakness; and when he came in, I found there

was tenderness on pressure, both at the right hypochondrium and the epigastrium, so that he clearly laboured under inflammation of the liver. The eyes were yellow. His motions were white, and the urine like porter; but if you turned the edge of the vessel aside, you saw that it was of a bright yellow colour. He had a pricking sensation of the skin throughout the body. It is very common to hear patients labouring under jaundice complain of an intense itching of the skin. They say they could tear themselves to pieces, and very often it is so severe, that it amounts to pricking and tingling.

Treatment.—Now I had no doubt, that by treating this case simply as hepatisis,—inflammation of the liver, I should cure him. He was cupped to twenty ounces on the right side, took five grains of calomel every night, and was purged with salts and senna in the morning. I need not detail the particulars of the case. The pain on the right side went away in two or three days, and the patient would not allow that there was anything the matter with him, though his skin was still as yellow as a guinea. You find that after you have cured the proximate cause, and removed all obstruction (after you find the stools pretty bilious; in fact, containing a quantity of bile), the patient will still be yellow. The bile has got into the blood, and it will be some time before it can escape, and therefore this man, after he had lost all his pain, felt himself quite well, and after the stools contained a due quantity of bile, still made high-coloured urine, and was yellow throughout the skin. After a few days only, the yellow declined. You are continually plagued by patients relative to their being yellow, when you are quite satisfied, from the appearance of the motions, and from the general improvement of the feelings, that you have removed the proximate cause.

AN EEL IN THE STOMACH.

Mrs. Hanson, the wife of S. B. Hanson, of Belfast, Maine, aged about 23, was found, eight months since, to be in a declining state of health, in consequence of what was considered a deranged state of the abdominal and thoracic viscera, originating from leucorrhœa. The symptoms were such as to warrant the presumption, and she was treated accordingly by several scientific physicians, for about six months, during which time she gradually declined in health, until the system became extremely exhausted and emaciated. About five weeks since, it was ascertained that a living creature of some kind, and of considerable magnitude, actually existed in the stomach. This was ascertained by placing the hand on the gastric region, when a vigorous squirming motion was felt through the emaciated integuments, as well as from her own repeated and positive declarations. It was a question in the mind of her physician, whether, in the then existing state of exhaustion, the system could sustain the

action of medicine of sufficient power to destroy the animal. After some deliberation and consultation with the husband and friends of the afflicted, together with the urgent solicitations of the patient, it was determined to make an effort, which resulted on the fourth day in the evacuation of an eel, *ten inches in length*, and of the usual size. The skin and flesh were denuded considerably by partial digestion, but the form was sufficiently entire to convince the most incredulous of its identity. She is now in a very low state, labouring under all the symptoms of ulceration of the stomach and bowels. She is supposed to have taken it some years since in drinking from a spring in the evening, at which time she was sensible of swallowing some solid substance of very small dimensions. The medicine given produced very little disturbance to the general system, and was sustained without much increased exhaustion.

LONG FEMALE TONGUES.

M. Fournier saw a woman at Berlin whose tongue was amazingly large, but thin as a cat's. When this woman laughed, her tongue covered the whole of her mouth, and hung out like folds of drapery. It was always cold, and communicated a most frigorific sensation to the hand of another person. The same author knew a handsome young woman, fifteen or sixteen years of age, who, although she had a long neck, could extend her tongue to her breast without stooping her head! If these organs performed their loquacious functions in a manner proportionate to their magnitude, what a perpetual ringing of treble-bob majors and grandsire cators for the poor devils, their husbands, to endure!

CHESELDEN

Was surgeon when Dr. Monsey was first appointed to Chelsea hospital. Cheselden treated the doctor with great attention and civility, but he himself was more flattered by having the mechanism of his chariot and the splendour of his equipage admired, than by being told that he was the first surgeon in Europe, as was really the case. Pope, whom the doctor often saw at his friend's house, found out this secret, and profited from it; by introducing Cheselden's name into his epistles, and by humouring this blameless foible, the house, carriage, and servants of Cheselden, were always at the poet's disposal.

TO CORRESPONDENTS.

E. L. R.—The symptoms are those of cataract; he had better go to the hospital at once.

Amicus must communicate privately.

A. S. T. had better be sounded, and make sure of the existence of stone in the bladder.

H. B. passing a bookseller's window saw the FAMILY DOCTOR, and purchased it. We thank him for his hints and good opinion. In return, we advise him to put his limb under a pump every morning.

Mayle Rome.—Rub the sores with the common Golden Ointment, and wash with brown soap,

G. P., Glasgow.—The occupation has something to do with it. The bowels should be kept regular, and vegetable diet used for a time.

T. L., Leighton Buzzard, Bedfordshire.—The whole of his complaint lies in his occupation. He ought to have more exercise in the open air.

A *Friend at Leigh* writes thus—

"Union-street, Leigh, August 23, 1845.

"Dear Sir,—I have to present to you my grateful acknowledgments for the kind and valuable directions which you gave in an early number of your interesting and important work, for the use of a man about whom I wrote to you. I was from home when the number alluded to arrived here, and the complaint made such rapid advances that he died the week following. I expressed a wish that his body might be opened, that I might send you a particular account of the state of his stomach, which was the seat of his disease. The contents, which for a length of time were thrown up, were of a greyish colour; but a short time before his decease they acquired a dark hue, like mud, I was told. For about six months he was obliged to take pills or castor-oil, so that there seemed to be a closing in the lower orifice of the stomach, or a want of action in the stomach itself.

"I have been so engaged since his death, that I have not found an opportunity of addressing you earlier.

"I am glad to inform you that your work is much approved of by the few persons who take it in this locality. I hope the number will shortly increase, for I consider it a very cheap work. I ought to have stated, that though I was from home, he got to see the number shortly after its publication."

—We advise him to leave matters as they are.

J. B. D.—This complaint seems also to be cataract: now in such cases nothing can be done without ocular examination. Take him to the nearest hospital or dispensary, and satisfy yourself. The magazine he alludes to will appear, we understand, again.

M. H.—Rub the back well with hartshorn and oil. Take half-an-ounce of turpentine, to get rid of the worms.

Richard Aspden.—His complaint is indigestion, and no doubt heightened by his work. He must drink a tablespoonful of infusion of quassia twice a day, and keep his bowels regular.

G. D.—One tablespoonful of Gregory's mixture night and morning.

W. H. C., Derby-street, Bolton.—The employment is evidently the cause of mischief, both with himself and wife. It is difficult, in such a case, to talk of a cure; all that can be done is to recommend him to keep his bowels gently open, to take a little chalk or carbonate of soda, and to pay strict attention to diet, &c.

H. J., Sunderland, should not alarm himself needlessly. Evil comes soon enough, without bringing it quicker. We do not see anything particularly alarming in his symptoms.

G. P., Nottingham.—Take a couple of rhubarb pills occasionally, and a wineglassful of infusion of Peruvian bark every day at noon. Eight postage stamps can procure him from us the pills by post—that is to say, a box of them—cheaper, we should think, and better than he can get them anywhere else.

Sambo.—Try the camphorated spirit of wine. Here is a recipe for the cure of chilblains:—Expressed oil of sweet bay three drachms, citron ointment four drachms, camphorated oil of almonds, oil of turpentine, of each two drachms—mix.

W. G. Z., Macclesfield.—Take for a week, every other night, Pulv. opii. half-a-grain, Pil. Hydrg. three grains; then drink the infusion (not the decoction) of sarsaparilla.

D. J. Bray.—We have not had time to read his article, but shall return it by post to him. Sorry that we do not require it.

N.B. Medical Advice will always be given to any person (gratuitously) through the pages of the FAMILY DOCTOR; but it is necessary to give age, sex, employment, symptoms of disease, length of its duration, together with the most probable cause, or at least to describe the commencement of the attack. Any one may have advice through the above medium—viz., *answers to correspondents*, without the necessity of giving their names, or the possibility of their being made known; only, there may be questions which we shall decline answering in our pages, in which cases the patient may correspond with the editor, receiving advice until cured, on payment of 2s. 6d., as a fee, in the outset. In all cases direct to the Editor of the FAMILY DOCTOR, 4, York Cottages, St. Mark's-road, Camberwell New-road, London.

THE

FAMILY DOCTOR.

ILLUSTRATED.

No. 14.] SEPTEMBER 6, 1845. [PRICE 1½*d.*

Philomène Hélène.

MONSTROUS BIRTH IN FRANCE.

ACADEMY OF SCIENCE.—PARIS.—MEETING OF THE 25TH AUGUST.

(*Translated expressly for the* FAMILY DOCTOR.)

Medical Science. Absorption of Bones.—M. Flourens read a note on the absorption of bones,—a question which he has made his particular study, and in the examination of which he had made new experiments. From preceding experiments he proved.

1st. That bone grows lengthways by plates in juxta-position.

2nd. That it increases in size by external plates superposed.

3rd. That the medullary canal increases in diameter by the absorption of the interior plates of bone, forming the first original deposit.

It is known that Duhamel explains the increase in the medullary canal (or hollow part of the bone) by the extension of the bone itself, whilst M. Flourens explains it by absorption.

To avoid inferences, which his previous experiments might give rise to, they being made, according to those of Duhamel, and which consisted in placing a metallic ring round the bone, M. Flourens proceeded in a different manner. Instead of a ring which presses upon, resists, or which might break the bone, he used a very small plate of platinum, so thin that it had scarcely any weight, and which was isolated from the bone, moving freely and offering no resistance. He placed this plate under the periosteum of the tibia of young dogs. What happened to the ring also occurred to the platinum plate. Each was successively covered by periosteum and by plates of bone, more or less numerous. Finally, each were found inside the bone in the medullary canal.

However, remarked M. Flourens, the platinum did not resist, nor was it broken. The bone, too, which was originally under the plate, is now above it. That is to say, the primitive bone has disappeared, and a new one has been formed.

The bone which exists now is not that which was when the platinum ring was applied. It has been formed since the old bone is gone: that has been absorbed. Thus the absorption of bone is clearly demonstrated to be a positive fact.

The conclusion arrived at by M. Flourens is similar to that which Buffon, Cuvier, and Leitnitz, advanced,—that all our organs are renewed, changed, and reformed, so that in this point of view life seems only a constant mutation of matter.

Monstrosity. Union of two Twins by the Abdomen. — A case of monstrosity—the rarest and most singular—has been discovered in a village, in the department of the *arrondissement* of chatre department of Indre. It is the birth of a monster, whose two imperfect bodies are joined together by a unique and common belly. Doctor Decerfs reports as follows:—

On the 6th of August, 1845, the wife of G— de Chasse, Pain, was delivered of two infants, twins, joined together at the belly, and which presented the oddest and most monstrous conformation. The twins, born at the usual time, were enclosed in the same membrane. There was only one *placenta*, and only one *umbilical* or navel string. This double child was at first supposed to be masculine, and was baptised under the name of John and Peter; but as it is evident that the sex is feminine, it was agreed that the twins should be inscribed under the names of Philoméne and Helêne. The two present two bodies, placed horizontally and quite distinct to the base of the thorax, where there is a junction by the two bodies into a common abdomen. There is only one umbilical placed a little out of the medial line, and only one anus, situated at the lowest declivity of the lumbar region, covered by a kind of valve. The valve being raised, two openings are apparent, one at the right for the *fæces;* one at the left for the urine. The abdomen, which unites the two children, is relatively more voluminous than the other parts. The two heads are diametrically opposite, and very well formed. Both have the same dimensions and the same diameter; all the organs, all the regions of the two bodies present the most perfect regularity, and the most exact corelation even to the base of the chest, where, however, all becomes anomalous and monstrous. Each child has a separate heart whose beatings are perceptible, and which are exactly corresponding with the beat of the pulse. The lungs perform their functions regularly.

One of the twins, Philomêne alone, takes the breast. The other has constantly declined, although the mouth and tongue are well formed. Its nourishment consists only in some drops of milk, which its mother puts into its mouth. What is most singular, the one which takes nothing is the most lively, and seems to enjoy the best health. It is also the only one which squalls. This new case of monstrosity appears to be different from any hitherto known.

There are only distant resemblances with the Hungarian daughters, Helêne and Judith, of whom Buffon speaks, and who were connected by the loins; but whose organs were all distinct, with the exception of the anus. It differs likewise from the Siamese twins, who were only connected by a ligature. At the request of the author of this communication, a commission composed of M. M. Serres Isid, Geoffroy, Saint Hilaire, and Velpeau, were charged with the examination of this monster, and on which they were to report to the academy. (We shall, of course, report this to The Family Doctor.)

BONES AND JOINTS.

Their Diseases and Injuries.—We are unwilling to leave this subject unfinished, although anxious to proceed to the consideration of the brain and nervous system.

Bones consist principally of gelatine cartilage and phosphate of lime. In the fœtus of six weeks old there is nothing but gelatine, afterwards cartilage is deposited, and phosphate of lime forming the osseous system. It is singular that bones grow only at their extremities, and it has been shown that the membrane covering them, called *periosteum*, chiefly deposits the bony matter layer above layer, and re-produces bone when removed, such as, for instance, in the skull. Bones are subject to all the diseases to which other tissues are liable, to acute and chronic inflammation with their results. The *periosteum* is also liable to inflammation. There are deep-seated pain, swelling, increased heat, and sometimes discoloration of skin. The pain is violent, according to the density of the bone affected. Treatment, leeching, fomentation, poultices, and long incisions, as in erysipelus. In inflammation of the bone itself the pain is more acute, because it cannot expand like the soft parts. The soft or spongy bones, such as the bones of the *carpus*, *tarsus*, and *vertebræ*, are more liable to suppuration. The *tibia* is often affected with abscess. In such a case a few deep incisions must be made to allow the matter to escape. Bones are liable to *caries* or ulceration, and young people are sooner affected with it than the old. Fomentation, poultices, &c., are employed, but burning with a red hot iron, or the *cautery*, is the most approved. The indolent or callous ulcer should be treated with camphorated mercurial ointment. *Caries* of the vertebræ generally ends in curvature, although in the lumbar region, an abscess may form. Where caries exists there is great pain on putting the hand down the spine, there will also be an unnatural projection; but the natural one at the back of the neck must not be mistaken for disease, as we have known it to be the case: curvature of the spine, however, deserves a separate consideration. Gangren attacks the bones generally of youths: the periosteum inflames, thickens, and separates from the bone, which becomes as dead as a tree with the bark shorn off. New bone is, however, deposited, leaving holes for the old to escape, during which violent fever is often excited. The deposition of new bone undergoes the same changes as in the fœtus. The same treatment formerly described is applicable here, but the old bone must be got rid of, or serious constitutional disturbance may destroy the patient.

Tumours are formed in bones, either hard or soft, and of various characters. They may remain mild in character during life in some cases, but in others it is quite different. Those tumours in the head are generally small, whilst those in the metacarpal bones, carpus, and tarsus, grow to an enormous size. In the pelvis the urinary

organs may be affected by their dimensions. When small and hard it is best to leave them alone: when they are soft and painful they should be excised, that and amputation when they occur in the toes being the best treatment.

Rickets is a disease more familiar. It consists in a softening of the bone in consequence of the absence of phosphate of lime; the glandular system, liver, spleen, and respiratory and digestive organs are affected; the head becomes enlarged; the spine and bones twisted: it occurs between six months and two years of age. The child will be plump and healthy until teething commences, when they become feeble, emaciated, and the bones unable to support the weight of the frame. Attention must be paid in the treatment to the bowels, and diet; anti-acids must be given, such as carbonate of lime, animal jellies, wine, rest in a horizontal position, exposure to open air, sea-bathing, &c.

If contortion of the spine is threatened, stays must be used and iron rods extended down the legs. There is softening of the bone of another description, in which the urine carries off the phosphate of lime, which nature would deposit elsewhere. The treatment is the same as in *rickets*. It may be remarked that such a disease may be produced in individuals who are not ricketty, in consequence of eating too much salt, the muriatic acid it contains being known to dissolve phosphate of lime. In syphilitic constitutions the same result is perceptible. There is also a disease in which phosphate of lime forms the chief part of bone, and, consequently, it is easily broken when the animal matter is removed. In fact the bone will snap like a dried stick. Scorbutic constitutions are liable to it, and with them it may be cured by vegetable acids, sarsaparilla, and nitric acid. When it occurs in old age it is incurable. There was one case in which every bone in the body broke when touched, and the bones of the skull crumbled down under examination. There is, finally, another disease to be mentioned, it consists in the junction of the ends of the two bones at the knee-joint, forming what is called the stiff joint. We shall pursue this subject under the head of *Surgical observations*.

PORT-WINE AND BARK.

The physician of a young lady prescribed, as a strengthener, that she should take a glass of *port-wine and bark* every day. His advice was followed, inasmuch as the patient drunk the wine, and ran about the house *barking like a dog*. Upon being remonstrated with for such folly, she very coolly observed, "Why, Dr. —— told me to take port-wine and *bark*." This circumstance may be relied on as a fact.

PRACTISE OF MEDICINE.—PALSY AND PARALYSIS.

Consists in a loss of power over one or more parts of the body. It is an exceedingly dangerous symptom, but more so in the old than in the young, as the powers of the constitution are not sufficient in the latter case to rally the system. The reader must understand that muscular power, or the moving agency, proceeds from the brain and spinal marrow, the nervous influence being distributed over the whole body by those little conductors called nerves. The brain itself may become paralysed, so may the heart or lungs, in which case the stroke may become mortal. The stomach and bladder are equally affected. Indeed our opinion is that irritating substances introduced to the stomach in disease, set up by long standing in digestion, will inevitably act on the brain, and the brain re-act on the system, causing loss of sensation and moving power of the latter, without the former. Excessive use of tobacco will cause palsy, anything irritating the brain itself, such as excessive study or external injuries produce the same result. It would be impossible to describe all the causes or sources of this malady; but it is self-evident, that the disease springs from, and can only be reached through the nervous system. There are peculiarly marked cases of paralysis, which affect only for instance the lower extremities, and, at times, only one half of the body. Drunkards are liable to it, not only from the excessive effect on the brain of strong potations, but likewise from sleeping in the open air or on damp floors, &c. The lower extremities may be paralysed by excessive indulgence of the animal passions, abuse of masculine power, &c. Excessive tea drinking will even go far to excite or produce palsy. In old age it will result from sheer exhaustion of nervous vigour. We should certainly be inclined to say that more cases of paralysis occur through indulgence than from any other cause—a stroke of palsy sometimes occurs, and the patient suddenly falls and injures himself. He naturally attributes the evil to the fall, but the question arises, did not the loss of power itself cause the fall? Hence we must inquire further into the case, and the habits of the individual, which we can assure the reader are concealed with as much art as possible from the medical attendant. How absurd and even criminal is such conduct, because the meaning of it simply amounts to this, dust is carefully thrown into the medical attendant's eyes, and then he is called upon angrily for a cure. Suppose he succeeds in penetrating the secret, what can he think of your opinion of him, and what may be his opinion of you —contempt and pity. How many drunkards I have seen cripples through indulgence!—How many fine young men paralytic through their secret vices? Yet both continue the cause, and cry aloud for a remedy. Hence the numerous unjust accusations brought against medical science. The previous symptoms are generally prickling pains, numbness, irritability, confusion of mind, desponding, and one or two warning hints from nature of the approach of danger,

such as twitchings about the mouth or limbs, sudden contractions of the limbs, and a general dull senseless cold feeling running through the frame. The head gives frequent warnings of a very ominous character, such as heavy pains, shooting pains, feeling of weight, accompanied with involuntary muscular contractions. In such cases wait for nothing, but get the bowels instantly opened with five grains of calomel, and 15 of jalap. If the person is young, and there is any fullness of habit, bleeding must be resorted to, and blisters freely applied. If the patient is old, and palsy arises from a failing of nature, a generous diet must be allowed, such as beef, wine, and mustard, horse-radish, as condiments, and even brandy and water. Cephalic snuff has been praised as a stimulant to the brain.—20 drops of spirits of lavender, and 20 of tincture of castor, in a glass of wine have likewise been found beneficial. But when palsy is of long standing, or when one part of the body is paralysed, and the other parts in a natural state, nothing is so good as the electric shock. Friction may be employed with great advantage by flannel or the flesh brush. We have tried in a very bad case successfully the 16th part of a grain of *strichnine* night and morning, the only difficulty is to get it good. Exercise in the open air above all things, and an excursion to some of the watering places should be recommended. Flannel clothing is very important, and every care should be taken to avoid damp sheets, bedrooms, &c. In too many cases the vices of excessive indulgence leave little if any chance of recovery, the constitutional powers being sapped and overthrown. It will be wise when our readers understand the nature of the disease to employ a qualified person to treat it as it is a complaint not to be trifled with.

HINTS FOR SEPTEMBER.

The cold which, during this month, is generally pretty sensibly felt night and morning, ought to cause people to be cautious how they expose themselves at these periods.—Beware of a summer cold. —Severe colds and sore throats too are, however, caught through wanting proper precaution being taken against the great change of temperature, which we experience in September, between the noon heat and the evening chill. Gum arabic is a good thing to chew, also liquorice juice, or even sugar and butter. A handkerchief should be worn over the mouth at night by every one who has tender lungs. Those who have the chance of eating indigestible game, should look to their bowels. The same applies to fruit still unripe, which give rise to flatulency, colic, and British cholera. A little castor oil will answer very well when the bowels are thus disturbed. As the weather has turned out unexpectedly fine, nothing can avert ill health so much as sea-bathing, and pleasant trips, with pleasant company, to pleasant places.

CHEMISTRY ON OXYGEN GAS.

Oxygen gas was discovered by Priestly in 1774, who named it Dephlogisticated Air. By Scheele, a year or two afterwards, without knowledge of the previous discovery, he called it Empyræl Air, and Condorcet Vital Air. These successive titles have all given place to the present name by Lavosier, derived from the Greek *Oxus* acid and *gennaw*, I generate, from the belief that it is the sole cause of acidity. Oxygen gas may be obtained from the peroxide of manganese, lead and mercury, nitre and chlorate of potash, when reduced to a red heat. It is commonly procured from the former and latter substances. The peroxide of manganese

Consists of	Manganese	27.7
,,	Oxygen	16
		43.7

When exposed to the heat of a furnace in a gun-barrel, or iron or earthenware retort, it parts with half an equivalent of its oxygen, and is converted into the sesquioxide; every 43.7 grs. loses, if quite pure, 4 grs. of oxygen or nearly 12 cubic inches; one ounce will yield nearly 128 cubic inches of gas. But the action is different when put in a state of fine powder into a blast, with an equivalent of sulphuric acid, heated by the flame of a spirit lamp. The peroxide loses a whole equivalent of oxygen and is converted into the protoxide which unites with the acid, forming a sulphate of the protoxide of manganese, every 43.7 of the peroxide must accordingly yield 8 grs. of oxygen, and 35.7 of protoxide, which uniting with one equivalent of the acid, forms 75.7 of the sulphate. The first of these processes is most convenient in practice. The gas procured from the peroxide of manganese, though sufficiently good for common use, is never quite pure, owing to the presence of iron, carbonate of lime, and other earthy substances. It yields a gas of better quality if the peroxide is previously freed from the carbonate of lime, by diluted muriatic acid. It can, however, be obtained in the greatest purity from chlorate of potash placed in a retort of green or white glass, made without lead, and heated to redness. It is resolved into a liquid, and becomes quite free from water, on an increase of heat it is wholly converted into pure oxygen gas, which escapes with effervescence, leaving a white compound called chlorate of potassium. Chlorate of potash

Is composed of	Chloric Acid,	75.45	or 1 equv.
,, ,,	Potash	47.15	,, ,,
		122.60	

Hence the oxygen which passes over from the retort is derived partly from the potash and partly from the chloric acid; white chlorine and potassuim enter into combination thus:—122.6 grs. of the chlorate

converted into 76.6 grs. of chloride of potassuim, and 48 grs. or about 161 cubic inches of pure oxygen.—Oxygen gas is colourless, destitute of taste or smell, is not chemically affected by the imponderables, refracts light feebly, and is a non-conductor of electricity. It is the most perfect negative electric we possess, always appearing at the positive pole when any compound which it contains is exposed to the action of galvanism. It emits light and heat when suddenly compressed, but which Thenard imparts to the oil in the compressing tube. When not united with any other imponderable it is always in the form of gas. Oxygen is heavier than atmospheric air. Its specific gravity is not yet satisfactorily known, but varies from 1.1026 of Dulony and Bergilius, to 1.111 of Thompson. According to Dr. Thompson 100 cubic inches, with the thermometer at 60 fr., and the barometer at 30 inches will weigh 34.454 grs. It is very sparingly absorbed by water, 100 cubic inches of that liquid dissolving three or four of the gas. It possesses neither acid nor alkaline properties, for it does not change the blue colour of flowers, nor does it unite directly with acids or alkalies. It has a very powerful attraction for most simple substances, and there is not one of them with which it may not be made to combine. The act of combining with oxygen is called *oxidation*, and bodies united *oxidized*. The compounds, so formed, are divided into acids and oxides. The former division includes those compounds which possess the general properties of acids. The latter, those which not only want that character, but many are highly alkalized and yield salts by uniting with acids. The phenomena of oxidation are variable, sometimes with rapidity as in ordinary combustion; and when the bases of the fixed alkalies unite with oxygen, on other occasions it takes place slowly, without any appearance of heat or light, as in the rusting of iron when exposed to a moist atmosphere; or in the case of Singleton's golden ointment, a famous quack remedy for sore eyes, stumbled on no doubt by accident, but which defied discovery for some time, and now known to be red precipitate rubbed for a lengthened period in the open air until it becomes of a golden yellow colour from the absorption of oxygen. Different as these processes appear oxidation is the result of and depends on the presence of oxygen in the atmosphere.

All substances which burn in the open air burn with the greatest splendour in oxygen gas. A piece of wood on which the least spark of light is visible bursts into flame the moment it is inserted into a vessel filled with oxygen. Lighted charcoal emits beautiful scentilations and phosphorus burns with so powerful and dazzling a light that the eye cannot bear its intensity. Even iron and steel, which are not commonly ranked among the inflammables undergo rapid combustion in oxygen gas. The changes which accompany these phenomena are no less remarkable than the phenomena themselves. When a lighted taper is placed in a vessel of oxygen gas, it burns for some time with renewed brilliancy, but the size of the flame soon

begins to diminish if the mouth of the jar be properly secured by a cork, and at last entirely disappears. The gas has now lost its characteristic property, for a second taper is extinguished when introduced. The burning of one body in oxygen unfits it for the combustion of another, as combustion is produced by the combination of inflammable matter with oxygen gas. The quantity of free oxygen therefore diminishes during the process, and is at length exhausted. The burning of all bodies, however inflammable, must ever cease because the presence of oxygen is necessary for its continuance. Therefore it is called a supporter of combustion. The oxygen often loses its gaseous form as well as its other properties. If phosphorus or iron be burned in a jar of pure oxygen over water or mercury, the disappearance of the gas becomes obvious by the ascent of the liquid which is forced up by the pressure of the atmosphere and fills the vessel. Sometimes it suffers only diminution of volume, or it may undergo no change of bulk at all as is exemplified by the burning of the diamond. The changes experienced by the burning body are equally striking while the oxygen loses its power of supporting combustion. The inflammable substance lays aside its combustibility. It is an oxidized body and cannot be made to burn even by the aid of the purest oxygen. It has also increased in weight. It is erroneous to conceive that bodies lose anything when they burn. The materials of our fires and candles do become invisible, but are not destroyed. They fly off in gas, but it is practicable to collect and preserve the products of combustion, and the increase of weight will be found to equal the quantity of oxygen which has disappeared during the process. Oxygen gas is indispensably necessary to respiration. The chief chemical properties of the atmosphere are owing to the presence of oxygen gas, air from which this principle has been withdrawn is nearly inert. It can no longer support respiration or combustion. No animal can live in such an atmosphere. Oxygen is consumed during respiration. For if a bird be confined in a limited quantity of atmosphere no inconvenience is perceptible until a few inspirations have diminished the quantity, when respiration becomes laborious and soon ceases altogether. Should another bird be then introduced, it will die in a few seconds and the flame of a lighted candle will also be extinguished—respiration and combustion produce the same effect, namely, the deprivation of oxygen. An atmosphere which cannot support combustion cannot support life, *et vice versa*. Since oxygen is necessary for combustion for the respiration of animals, &c. by which gas is withdrawn from the atmosphere, it it obvious that its quantity would gradually diminish unless the tendency of these causes was counteracted by some compensating process. That such a source does exist is evident as no diminution has hitherto been detected. It is only as yet known to be supplied by the action of growing vegetables. A healthy plant absorbs carbonic acid during the day, appropriates the carbonaceous part to its own wants, and evolves the oxygen with which it was

combined. Plants during twenty-four hours yield more oxygen than they consume. Whether this process makes a fair compensation is uncertain, although oxygen be necessary for respiration in a state of combination, it is singular that in a state of purity it is deleterious. When a rabbit is supplied with an atmosphere of pure oxygen gas no inconvenience is at first perceived, but in the course of an hour the circulation and respiration become very rapid and the system is highly excited. Symptoms of debility ensue, followed by insensibility, and death succeeds in a few more hours. On *post mortem* examination, the blood is highly florid in every part of the body, and the heart acts strongly after breathing has ceased.

DIALOGUE.

THE WEAVER.

An exceedingly pale-faced man, whose frame formed to be manly, was shrunk and withered, like a tree blasted by the lightning. His eye glistened, and his whole appearance announced as distinctly as bronzed letters could have done, want, woe, and misery.

"Doctor, if you please, I want to get bled?"

"Eh! what?" said I, starting in utter surprise, and gazing into his eye to see if the light of insanity shone there, but no, there was only the fire of starvation. "Get bled my man! get bled! are you serious?"

"Or I would not have been here, Doctor."

"My man, you must have been drinking?"

"Drinking, drinking, eh! Ah! Doctor, it is long since I drank anything. My home-brewing days are long gone, and I have no money for the Tom and Jerry shops (small beer houses) I wish it was only the drinking fever, but I am consumed, fairly boiling and burning, racking and raving with fever—feel my pulse."

"Why your skin is hot and dry, pulse feeble and quick, perspiration too—have you been running?"

"No, Doctor, I think those days are over, I sweat standing, although I remember the time when the yeugh, yeugh, yeugh, hoo! hoo! hoo! of the hounds, when they got the true scent used to make me and my brother, aye, and my old father, too, bounce off the bench and leave work as it was, and off away over the green fields and bushy knolls for many a long mile, gathering from every house a keen hunter and a strong runner, aye, swift of foot, Doctor, as a horse."

"Never mind, my good fellow, about the hunt—let me see—why where is your fever now my man?"

"I forgot it, sir, that I did; but I must be bled."

"You must, why so?"

"Because I have this gnawing fever about me in every vein; I feel it in every limb; my head, oh! my head is so giddy, and my heart beats so quick and flutters that I think it must be diseased.—I feel it burning down to my finger ends, and a sickness and windy rumblings in my stomach, and so faint that I begged a gill of ale, as true as heaven, the first time in my life this very day to keep off the sickness and give me strength to come here. I am sure I shall be thrown down if I am not bled in time."

"Ah! ah! I understand your complaint. What would you give to be cured of that fever in half an hour?"

"Give! Lord bless you, anything—I'll bring you as fine a brace of pheasants as you ever eat in your life."

"Pheasants! why don't you eat them or hares either?"

"So we do—but we sell them to get bread, and the keepers are so strict, and we so poor, we cannot purchase fire-arms, and dare not keep dogs. Never mind, Doctor, we have been kept out of the preserves for some time, but if you cure me I'll have a brace of birds by to-morrow night if there was the Squire himself looking on."

"I don't want that, my poor man; I don't want you to risk liberty even in breaking an iniquitous law—no, no, no. I will however, cure you, for I want to ask you a few questions about your trade as I have taken up those subjects, and I should like each trade to forward to me an account of the evils they endure—their bodily sufferings, their diseases, their average term of life, number of accidents, and all other things that would enable me to set their wrongs, as a medical man, fairly before the public."

"Is that what you want? Is it indeed?"

"It is so. I have spent much of my time in studying the moral and physical results of labour in Great Britain—I mean of excessive unremunerating, and destructive labour, and I wish to put it before the People and Parliament in a philosophical, rather than in a political, in a scientific rather than a sectarian point of view—will you lend me your aid, and ask the aid of every trade you know—will you answer me a few questions whilst you describe to me the results of your labour, on mind, and body. Will you help me to help the helpless, to protect the weak, and put down wrong and oppression."

"With all my heart and soul."

"Good—now I will give you some physic."

"Thanks, Doctor, thanks! but what are you smiling at? you don't make game of me?"

The bell was rung, a servant appeared.

"Bring in the cold beef for my lunch. If you have had your dinner, send up some potatos, and the strong ale. Don't be long, as I must be off to pay some visits."

The provisions were soon put upon the table.

"Well," said I, cutting at the cold delicious beef. "So you will answer me some questions will you? but sit down, sit down, at the table I tell you—no refusal, sir, do as I bid you—now then stop, some meat—there now eat away—that's your physic, my lad."

"In half an hour the fever of want of an empty stomach, which in my adventures varied and exciting through life, I have experienced myself will be gone. It is a deceiving thing, and many might bleed, but I have seen too much of life not to know that your complaint, my poor oppressed brother, is want, want, want—but as my presence may prevent you, I shall retire a moment—never mind how you cut, I shall tell you when you have had enough." In a short time wonderful progress was made. On my return he was still busy.

"Stop—you have enough—I know you could eat more, but it must not be. It will not do to run into extremes. Take a good drink of ale, and be off over the hills, slowly at first mind, and then as fast as you please."

"But the questions?"

"To-morrow will do for that."

STATISTICS.

Table of the comparative mortality of one year in towns, counties, &c. being the first return of the Registrar General of births, marriages, and deaths.

POPULATION.	TOWNS, COUNTIES.	DEATHS UNDER. 5 YEARS.	FROM 70 TO 80.	ABOVE 90 YRS.	OLD AGE.
236,935	Manchester and Salford ...	4,047	415	18	
110,914	Birmingham.....	1,471	200	10	
304,785	Cornwall...	2,217	623	62	
304,315	Essex.....	2,137	766	55	
311,714	Cambridge, Huntingdon & part of Lincoln	2,976	622	41	
338,273	Cumberland & Westmorland	2,272	825	96	
905,501	Lancaster, except Liverpool and Manchester	10,769	1,497	69	519
1,045,133	Derby, Leicester, Northampton, Nottingham, and Rutland ..	8,232	2,385	193	1,120
1,016,219	Wales, Monmouth, and Hereford...-.....	8,250	2,109	363	878

This table is a very instructive one, when we compare Manchester and Birmingham in regard to the deaths under five years of age, and then Lancaster with Derby, &c., and Wales, &c., multiply the Birmingham population by 3, and it will exceed Manchester, in point of numbers, but not in point of deaths, under five years. The numbers of the population of Lancaster and the two succeeding divisions again show a terrific difference with a greater population in each case of comparison. Look again to the column of old age, and compare 69 with 363, or in deaths from old age, 519 against 1,120 What, save the relative pursuits in these different districts, could account for the wide difference in mortality?

COMPARATIVE MORTALITY AMONGST 100,000 LIVING FEMALES, ANNUALLY IN

	Leeds.	*Birmingham.*	*Manchester.*	*London.*	*Liverpool.*
Epidemic	369	418	565	697	1,116
Typhus	115	126	180	196	339
Nervous	309	250	414	400	544
Respiratory	515	623	722	657	860
Otathis	401	494	510	402	670
Digestive	127	214	209	177	228
Locomotion Joints, &c.	16	12	19	74	7
Circulation	9	54	13	33	26
Violence	35	45	42	32	46
Old Age	138	156	128	218	163

The above table of comparative mortality evidently constitutes Liverpool the most unhealthy, whilst Birmingham and London stand high as towns conducive to long life. Leeds and Manchester do not present much difference. The great difference in Liverpool we think might be attributed to its floating population connected with the shipping, but the same applies more forcibly to London, and what have females to do with it, generally speaking. The site, air, and position have much to do with it.

MEDICAL RECIPES.

BILIOUS HEAD-ACHE PILL.

Take of antimonial powder a scruple, calomel fifteen grains, compound extract of colocynth one drachm. Mix and divide them into twenty pills. Two should be taken at night, with a small dose of Epsom salts next morning.

A GOOD EMBROCATION FOR PAINS IN THE LIMBS OR JOINTS.

Take a small quantity of olive oil, to this add about one-fifth of its quantity of liquor of ammonia. Shake them up together.

FOR INFLAMMATION OF THE EDGES OF THE EYELIDS.

Take of prepared calomel half a drachm, spermaceti ointment half an ounce.

Mix.—About the size of a small pea to be introduced into each corner of the eyes, and about that of a large pea to be applied along the course of the eyelashes every night at bed-time.

The following ointment was a favourite remedy for this complaint with the late celebrated oculist Mr. Weare.

Take of red precipitate of mercury finely powdered fifteen grains, spermaceti ointment six drachms.

Mix.—During the use of either of these ointments, the eyes should be washed two or three times a day with the astringent eye-water, and attention should be paid to the state of the bowels and general health. As an aperient, the mild aperient pills should be taken occasionally.

ANECDOTES.

A REPLY REFLECTIVE.

A Doctor who was very angry at hearing the faculty spoken against, said, there was nobody who could complain of him. "No," said the other, "and for this very good reason, that you kill everybody you get under your hands."

HOW TO GET ON IN THE WORLD.

"How is one to insure success in his profession?" inquired Dr. Read. "I love you," replied Dr. Radcliffe, "and will tell you a sure way to make your fortune—Use all mankind ill."

EXAMPLE BETTER THAN PRECEPT.

An eminent professor of medicine observed to his pupils, when delivering a clinical lecture on the effects of drunkenness, that, "one of the best sermons for drunkards, or regular tipplers, would be to exhibit to them the heart, liver, and lungs of an inebriate by the same organs in a sound state. Such an exhibition," said he emphatically, "would probably produce a greater effect on their minds, than all the sermons which have been preached on the subject."

MUCILAGES AND JELLIES.

Biscuit Jelly.—White biscuit four ounces, water four pints, boil to half a pint; strain and evaporate to one pint; then add, white sugar one pound; red wine four ounces; cinnamon water one ounce; in dysentry and weakness of the stomach.

Jelly of Iceland Moss.—Iceland moss four ounces, water enough to strain one pint and a half, then add white sugar four ounces. Nutritive and tonic in consumption.

Isinglass Jelly.—Isinglass two ounces, water two pints, boil to one pint and strain; then add milk one pint, white sugar candy one ounce.

TO CORRESPONDENTS.

Henry Green had better procure some iodine ointment and rub over the part affected, about the size of a pea, every night. He had also better write again.

J. H., Little Bolton.—The boy has scurvy. Let him eat apples, oranges, and give him occasionally some fresh beer, and let him drink a good quantity of lemonade, made by slicing down a lemon and pouring hot water over it: add a little sugar. His physic should consist of cream of tartar and salts; but he need not be purged much.

Mr. Healy, Edinburgh.—If he is subject to repeated colds he had better allow his hair to grow long at the back of his head. In the meantime take an opening dose of senna and salts: a warm bath might cure him at once.

Wm. L., Sussex.—Soap liniment and hartshorn, equal parts; rub well in, night and morning. It will be strange if that does not cure him.

John B., Nottingham, must take some grains of extract of colocynth twice a week, and a tablespoonful of infusion of quassia thrice a day. Bathe frequently.

Thomas Johnston, Hope-street, Shelton.—The child has evidently worms. The best thing to do is to give him two grains of calomel and eight grains of jalap twice a week, say for a fortnight. The other affection must be cured by the mother.

Frederick William, London.—Certainly, the case looks bad, but a great deal of evil is done through the imagination alone. He should read our treatment of consumption. The shower bath was too much all at once; he ought to have gradually accustomed himself to it, first using lukewarm and then cold water. We strongly advise him to find a situation in the West Indies, or a commercial agency in some of the Leeward Islands.

Constant Subscriber, Manchester.—Take of sulphate of zinc, twenty grains; laudanum, one drachm; vinegar, half an ounce; water, three ounces. Wash night and morning.

John Good, Leicester.—It is indigestion, and the cure is to attend strictly to diet and habits. He must have read our article, and, therefore, we need not repeat the instructions. We could easily send him a box of stomach pills if he wished it; but in case he does not, we advise him to get some common rhubarb pills and take two twice a week; also drink a wine glassful of infusion of gentian every day at noon. No drinking, smoking, or reading, before or after. or at meals.

Richard P.—Use before singing, a pinch of tartaric acid: let it dissolve in the mouth and swallow it. A piece of nitre will answer the same purpose.

W. X., Somers Town.—He can buy a quarter of a pound, and make the infusion by pouring over it a quantity of boiling water as one would tea. Strain when cool, bottle and use it as directed.

J. P. L.—Why despond? It is foolish. Is it possible for him to take a trip to the seaside.

G. L. L., Bradford.—We have before this prescribed for hair falling off. Rub the whole of the head with the yolk of eggs, then wash in warm water to which a piece of washing soda has been added, of about the size of a marble; then rub with a hard brush several times during the day, using a little pomatum for an excuse to rub away. He may rely upon that restoring his hair.

C. E., Grosvenor Place, Birmingham.—We shall have more time next week to supply him with the information.

B. B. H. will observe that we have answered the question put by G. L. L., which also relates to him.

Amicus.—Ought to apply privately.

A. M., a Reader, Glasgow.—Ung. Hydrg. one penny worth, rub in night and morning the size of a bean. Twice or three times will be enough.

L. B., Sheffield.—Nothing so good as having the hair cut short, and pouring a quantity of water over the head every morning. Let it be used with the chill off at first, then as cold as he can get it. Open the bowels first.

W. W., Manchester.—Must not make a practice of using the pills; accustom himself to be regular, and nature will soon get into his way. Take the pills only when compelled to do so. We advise every one only to take physic when they must.

S. S., Constant Reader, Central Market, Leeds.—Cannot expect us to answer his letter, except privately.

Solon has described the cause of his suffering by explaining the state of the counting-house, currents of air, dust, &c. If the pain is fixed, blister by all means; if not, take some gentle opening medicine twice a-week.

George Henry, Liverpool.—Extract of colocynth four grains twice a-week. Infusion of quassia, table spoonful morning, noon, and night. Sea-bathing if possible.

N.B. Medical Advice will always be given to any person (gratuitously) through the pages of the FAMILY DOCTOR; but it is necessary to give age, sex, employment, symptoms of disease, length of its duration, together with the most probable cause, or at least to describe the commencement of the attack. Any one may have advice through the above medium—viz., *answers to correspondents*, without the necessity of giving their names, or the possibility of their being made known; only, there may be questions which we shall decline answering in our pages, in which cases the patient may correspond with the editor, receiving advice until cured, on payment of 2s. 6d., as a fee, in the outset. In all cases direct to the Editor of the FAMILY DOCTOR, 4, York Cottages, St. Mark's-road, Camberwell New-road, London.

THE

FAMILY DOCTOR.

ILLUSTRATED.

No. 15.]] SEPTEMBER 13, 1845. [PRICE 1½*d.*

ANATOMY.

EXTERNAL APPEARANCE OF THE BRAIN.

OUR drawing represents the surface of the brain when part of the scalp and skull are removed. As we imagine a description of the brain and nervous system will prove interesting to the majority of our readers, we intend to devote a considerable space to their consideration, and, likewise, to give varied illustrations. The organ of

sensation and motion, the source of pleasure and pain, the seat of moving and being are all important studies for mankind. The substance of the brain itself is soft and of a whitey greyish colour. Immediately under the bones surrounding and covering the brain is a hard, strong, thick membrane, called by the ancients, the DURA MATER, or cruel mother, because it is the outer sheath or covering of this important organ or series of organs. It affords a defence to the brain as well as a support to its different divisions, of which we shall hereafter speak.

The *dura mater* adheres closely to the skull, and is supplied with a multitude of blood vessels, in accordance with the rule nature has carried out in the whole system. These vessels form little sinuses or reservoirs in the substance of the *dura mater*, undoubtedly for the purpose of rendering the circulation of blood more constant and free: and also to regulate the supply, preventing too rapid an abstraction of blood from this the most vital of nature's organs. The second or inner membrane is called the PIA MATER, because the ancients conceived it embraced the brain closer, dipping into all its furrows or circumvolutions. The *pia mater* is much thinner than the external membrane, and follows and lines all those tortuous looking ridges which the reader can distinctly observe. There are, consequently, two membranes covering the brain, the one ad-

hering to and following the internal surface of the bone, the other adhering to and following the inequalities or the surface of the brain itself. When the skull has been accidentally injured and a portion removed, the surface of the brain appears to rise and fall. These motions follow exactly the beat of the heart, and arise from the circulation of the blood within the brain, its soft substance and the immense number of arteries supplying that organ, rendering the elevation and depression sufficiently intelligible to the reader.

If any one will observe the head of a newly-born infant, the motion at the opening of the head, to which we allude, may be perceived at once. We knew, also, an instance of a man who had a hole in his skull, through which he used to allow the students to press upon his brain and feel the pulsation. Any one, however, in fever, or suffering from headache, can feel the effects of increased pulsation sufficiently to convince him of its existence.

Let the reader direct his attention to the appearance on the surface of the brain, and he must remark the tortuous convolated aspect it presents: it may remind him of a similar appearance in the intestines. These are formed by actual divisions, or rather ridges and furrows in the brain itself; they are formed chiefly from the external substance of the brain; as there are two membranes covering the whole of the brain: so there are two substances of which the brain is composed. The outer is called the *cortical*, or, as the ancients meant the bark, no doubt, from the analogy which exists between these ridges and those of the bark of a tree. The inner is called the *medullary*, or white internal substance, or kernel. The irregular convolutions on the surface of the *cortical* substance have been considered by Phrenologists to constitute the various organs, a table of which, or map, is drawn out on the surface of the skull representing the intellectual qualifications, the sentiments and propensities of man. We shall not pause to enter into the question, but we are bound to remark that these convolutions do not correspond with the inequalities of the skull, although the conformation of the entire skull must be analogous to that of the entire brain.

It may seem strange to many of our readers that, although the the brain is the origin of the nerves which convey acute sensation from burns, wounds, &c., that the substance of the brain has no feeling in itself; wounds have occurred in which portions of the brain have had to be cut away, and yet no feeling was experienced. Experiments have been made on animals, proving that not only may considerable portions of the substance of the brain be removed without pain, but even after their removal the powers of motion and sensation are retained in all parts of the body. The outer portion is, therefore, proved not to possess so much importance in the animal economy as the ancients believed. A vast amount of conjecture has been expended, theories advanced, and inferences drawn, all of them more or less erroneous. With these we shall not

interfere until the brain itself is exhibited by a drawing to the reader. In the meantime we may offer some observation on the diseases and injuries, which our drawing enables us to make clear and simple. There are cases of apoplexy in which fluid either serous or mixed with blood, is thrown out between the two membranes we have described, or between the skull and the external membrane, the *dura-mater*

In such cases, the unnatural pressure upon the brain produces loss of sensation; in that case of the man of whom we have spoken, artificial pressure upon the brain produced also less of sensation; heavy breathing, slow pulse, &c., indicative of the distress experienced by nature.

Apoplexy we have already treated in No. 3.

We alluded, when on the subject of the skull, to injuries of the scalp, to compression of the brain by blood, water, or bone; to inflammation of the membranes themselves, and to fractures as well as concussion. These must now be better understood. In each case, the vital organ is disturbed, more especially from depressed bone, although it does not always follow that we should have compression of the brain itself. When blood is thrown out, the same symptoms arise as from fractures, &c.,—viz., loss of sense and voluntary motion; there is a slow heavy pulse, heavy snoring, and dilated pupils; but in extravasation, or throwing out of blood,there is generally, a glimpse of reason, now and then differing from the symptoms of compression.

Inflammation of the membranes is a very serious disease, and requires strict attention and treatment. In operating, to lift up the depressed bone, or remove fragments, some operators have not feared to cut through the *dura mater*. Indeed in cases of water in the head, instruments are plunged into the brain, to draw off the fluid accumulated. The reader will now form a pretty general idea of the extent or formation of the brain, and of the diseases and accidents to which it is subject. We must refer him to the consideration of the brain itself, together with its shape, division, and uses.

THE THEORY OF COMBUSTION.

The only phenomena of combustion noticed by the ordinary observer, are the destruction of the burning body, and the development of heat and light; but it has been demonstrated that in addition to these circumstances, oxygen gas invariably disappears, and a new compound consisting of oxygen, and the combustible is generated. The term combustion, therefore, in its common signification, implies the rapid union of oxygen gas and combustible matter, accompanied by heat and light. As the evolution of heat and light is dependent on chemical action, the same phenomena may

be expected in other chemical processes, and accordingly, heat and light are frequently emitted quite independently of oxygen. Thus phosphorus takes fire, and a taper burns for a short time in a vessel of chlorine; and several of the common metals, such as copper, antimony, and arsenic, in a state of fine division, become red hot when introduced into a jar of that gas. Potassium takes fire in cyanogen gas; and copper leaf or iron wire if moderately heated undergoes the same change in the vapour of sulphur. A mixture of iron filings and sulphur when heated so as to bring the latter into perfect fusion, emits intense heat and light at the instant of combination; and a like effect, though to a far less degree is produced by the action of concentrated sulphuric acid on pure magnesia. Most of these, and similar examples, especially when one of the combining substances is gaseous, are frequently included under the idea of combustion; and they certainly belong to the same class of phenomena. In the subsequent observations, however, I shall employ the term in its ordinary sense; but, the remarks concerning increase of temperature, whether with or without light, apply equally to all cases where heat is developed as a result of chemical action. Lavoiser had the honour of overthrowing the Sephalian or phlogiston law by the discovery of oxygen gas; according to the former belief all combustible bodies contained a principle called phlogiston. The source of their combustibility, and their heat and light were attributed to the rapid evolution of this wonderful principle. That combustion and oxidation result from the combination of combustible matter with oxygen, was established beyond a doubt. On burning phosphorus in a jar of oxygen a considerable quantity of the gas disappeared, and the increase of the former corresponded exactly to the loss of the latter. An iron wire was burnt in a similar manner, and the weight of the oxidized iron was found equal to that of the wire originally used together with the quantity of the oxygen which had disappeared. And that the oxygen is really present in the oxidized body, he sufficiently exemplified. Some liquid mercury was confined in a vessel of oxygen gas, and exposed to a temperature sufficient for causing its oxidation; the oxide of mercury so procured was put into a small retort heated to redness, when it was reconverted into oxygen and fluid mercury, the quantity of oxygen being exactly equal to that which had combined with the mercury in the first part of the operation. To account for the production of heat and light during combustion, Lavoiser had recourse to Dr. Black's theory of *latent* caloric. Heat is always evolved whenever a substance, without change of form, passes from a rarer into a denser state, and also when a gas becomes liquid or solid, or a liquid solidises; because then a quantity of caloric previously combined is set free. Thus water is formed of the burning of hydrogen, in which case two gases give rise to a liquid. And in forming phosphoric acid with phosphorus, or in oxidizing metals, oxygen is condensed into a solid. When the product of combustion is gaseous, as in the burning of charcoal, the evolution of heat is ascribed to

the circumstance that the oxidized body contains a less quantity of combined caloric, or has a less specific caloric than the substances by which it is produced. This is, however, the weak point of Lavoiser's theory. Chemical action is very often accompanied by increase of temperature, and the caloric evolved during combustion is only a particular instance of it. Any theory therefore, by which it is proposed to account for the production of heat in some cases, ought to be applicable to all. When combustion, or any other chemical action is followed by considerable condensation, in consequence of which the new body contains less insensible caloric than its elements did before combination, it is obvious that heat will in that case be disengaged. But if this were the sole cause of the phenomena, a rise of temperature should always be preceded by a corresponding diminution of capacity for a caloric, and the extent of the former ought to be in a constant ratio with the degree of the latter. Now Petit and Dulong infer from their researches on this subject, that the degree of heat evolved during combination bears no relation to the specific caloric of the combining substances, and, that in the majority of cases the evolution of heat is not attended by any diminution in the capacity of the compound. It is a well known fact, that increase of temperature frequently attend chemical action, though the products contain much more insensible caloric than the substances from which they are formed. This happens remarkably in the explosion of gunpowder, which is attended by intense heat, and yet its materials in passing from the solid to the gaseous form expand to at least 250 times their volume, and consequently render latent a larger quantity of caloric. These circumstances leave no doubt that the evolution of caloric during chemical action is owing to some cause quite unconnected with that assigned by Lavoiser. And if this cause operates so powerfully in some cases, it is fair to infer that part of the effect must be owing to it on those occasions, when the phenomena appear to depend on change of capacity alone, a new theory is therefore required to account for the chemical production of heat. Yet it is easier to perceive the fallacies of one doctrine, than substitute another which will be faultless; and it appears that chemists must be satisfied with the simple statement, that energetic chemical action does of itself give rise to increase of temperature. The caloric emitted during combustion varies with the nature of the material.

Hydrogen, in burning, raises an equal volume of water				5 ft.
Carbonic oxide	,,	,,	,,	4½ ,,
Light Carburetted hydrogen	,,	,,	,,	18 ,,
Oilfiant gas	,,	,,	,,	27 ,,
Coal gas according to quality	,,	,,	10 to	16 ,,
Oil ,, ,, ,,	,,	,,	12 to	20 ,,

Generally the combustible gases give out heat nearly in proportion to the oxygen they consume, with the exception of hydrogen. These results are however questionable, and do not accord with those of other chemists.

DISEASES IN COUNTIES.

Lancashire—Population, 905,501.

Epidemic	1823	Typhus	501
Nervous	1579	Convulsions	973
Respiration	2578	Consumption	2085
Digestive	699	Childbed	113
	VARIOUS.		
Locomotion	79	Violent Death	341
Circulation	70	Old Age	519
	Total		9250

Wales, Monmouth, and Hereford—Population, 1,016,219.

Epidemic	2265	Typhus	645
Nervous	1243	Convulsions	870
Respiration	2134	Consumption	1745
Digestive	399	Childbed	84
	VARIOUS.		
Locomotion	68	Violent Death	355
Circulation	42	Old Age	878
	Total		9130

Derby, Leicester, Northampton, Nottingham, Population, 1,045,133.

Epidemic	1750	Typhus	515
Nervous	1511	Convulsions	858
Respiratory	2556	Consumption	1960
Digestive	621	Childbed	87
	VARIOUS.		
Locomotion	57	Violent Death	331
Circulation	98	Old Age	1120
	Total		9871

Population who die above 70.

London	104	Norfolk and Suffolk	196
Birmingham	81	Devonshire	192
Leeds	79	Cornwall	188
Liverpool and Manchester	53	Northumberland, Cumberland and Westmoreland	198
North and West Riding Yorkshire	210		

In some districts, &c., annual mortality is 4 per cent., in others, 2 per cent.; in one, some live 50 years, in others only 25—nearly 8 per cent. sick—possible to reduce the deaths 30,000.

The recorded cases of 141,607 deaths registered in the half-year ending December 31st, 1837.

DISEASES IN CITIES.

MANCHESTER—Population, 256,935.

Epidemic	881	Typhus	274
Nervous	650	Convulsions	427
Respiratory	1079	Consumption	729
Digestive	304		
VARIOUS.			
Locomotion	25	Violent Death	158
Circulation	34	Old Age	165
	Total		3703

LIVERPOOL—Population, 218,233.

Epidemic	1666	Typhus	524
Nervous	870	Convulsions	605
Respiratory	1287	Consumption	965
Digestive	332		
VARIOUS.			
Locomotion	15	Violent Death	121
Circulation	40	Old Age	184
	Total		4913

BIRMINGHAM—Population, 110,914.

Epidemic	252	Typhus	75
Nervous	188	Convulsions	72
Respiratory	480	Consumption	354
Digestive	170		
VARIOUS.			
Locomotion	7	Violent Death	45
Circulation	32	Old Age	80
	Total		1459

LEEDS—Population, 135,581.

Epidemic	282	Typhus	71
Nervous	302	Convulsions	143
Respiratory	448	Consumption	335
Digestive	103		
VARIOUS.			
Locomotion	14	Violent Death	70
Circulation	19	Old Age	102
	Total		1582

DR. RADCLIFFE.

Dr. Radcliffe, attending the lady of Lord Chief Justice Holt, with a diligence remarkable for one of his situation, as a physician, was asked by one of his intimate friends the cause of it. "Why," says Dr. Radcliffe, "to be sure, I have brought her through a very obstinate disorder, though I have no particular regard for the woman; but I know that her husband hates her, and therefore I wish to plague him."

PRACTICE OF MEDICINE.

SORE THROATS

ARE very common at this season of the year, and we imagine a few words under that head will not be out of place. There are two kinds of sore throat, the simple inflammatory attack, and the putrid; the distinctive feature of the latter is ulceration. To ascertain its presence, the tongue should be pressed down with a spoon, and then, if they are present, the ulcerated patches will become visible. In both cases pretty active treatment is required. In the simple case, inflammation may end in the deposition of matter, which may again form a quinsey, one of the most annoying and alarming complaints we know of. The *cause* is generally cold, suppressing an active perspiration, sudden exposure, leaving off an accustomed article of clothing, sleeping in a damp place, or sitting in draughts of air. It is habitual, and even constitutional, to some persons; that is to say, they are born with irritable mucous membranes. The *symptoms* are easily perceptible:—the soreness experienced in swallowing, the positive appearance of inflammation in the throat itself, and the accompanying fever, are pretty good evidences of what is going on. We need not dwell on symptoms so commonly known and appreciated.

Treatment.—Attention must be paid to the diet; the food being light, and, from circumstances, chiefly fluid; the drink should be acidulated with black currant jelly or lemons, as much as possible. The patient should not be disturbed, but kept as quiet as possible; warm flannel should be placed around the throat, and perspiration encouraged as much as possible. The local treatment consists in the use of gargles, composed of infusion of roses and sulphuric acid; vinegar and honey, mixed in any light decoction. The best gargle we know, is composed of rose water a pint, alum half an ounce, sulphuric acid two or three drachms. The alum exercises a powerful influence over inflammatory affections of the throat. That gargle, frequently used, together with leeching the throat, applying, say two dozen leeches at once, and using the hip bath, to promote perspiration when in bed, have, as far as we have seen, put to the rout the most inveterate inflammation. We may remark, that inhaling the steam of boiling water, affords great relief:—the bowels must be attended to, and kept gently open. If any matter should appear, the lancet should be applied at once.

In putrid sore throat, a gargle of port wine is very useful in warding off gangrene. Cayenne lozenges, in the commencement, are highly spoken of. There are acute cases of sore throat in which bleeding is necessary at the arm, but that should only be employed to arrest the general fever. We have used mustard plasters to the back of the head, in our own case, and found it answer remarkably well. We may sum up these remarks, by pointing out the alum gargle, leeches, mustard plasters, the hip-bath, and keeping the bowels open, even

with an infusion of tamarinds, used as a drink, as being the most successful practice to pursue, in almost all cases. The more violent cases of course require more violent remedies, such as the lancet. Prevention, however, lies in the hands of all, and that we consider the wisest course to pursue. It consists in avoiding draughts of air, rapid changes of temperature, sudden exposure, and being, at this season, provided with a small piece of nitre or alum, to suck, at times, together with a comfortable silk handkerchief to put over the mouth at night. We must not forget dry feet for the approaching season, a most important consideration for any one subject to inflammation of the throat, and its tedious, painful, and afflicting affections.

SURGICAL NOTES.—FRACTURE OF THE BONES.

Fractures are commonly divided into simple and compound; but there are more numerous sub-divisions. The French comprise all under simple and complicated. The following list will give the reader a better idea of the various injuries sustained by the bones:—

1st. Simple fracture occurs when the femoral bone, for instance, is fractured, without the flesh being wounded or the bone exposed.

2nd. Compound fracture occurs when the broken bone protrudes through the skin, or where there is an opening large enough to admit the fingers.

3rd. Oblique fracture occurs when the bone is broken in that direction.

4th. Transverse, when broken also in that direction.

5th. Comminuted, when the bone is broken into a number of pieces.

6th. Longitudinal, when a gunshot splits the bone up.

7th. Complicated, when the fibula is broken, and the ankle-joint dislocated at the same time.

Long bones are generally broken in the centre and in an oblique direction; short ones, near the end. Fractures are caused through disease of the bone, the age of the person, cold, &c.; also by blows, falls, violent muscular exertion, &c.

The *symptoms* are pain, inability to move the bones, alteration in the form of the limb, swelling and shortening of the limb; but the best evidence is feeling the ends of the bone and hearing the crackling or crepitus. Sometimes it is difficult to decide between fracture, luxation, and a bruise.

The theory of fractures consists in the vessels of the bone, periosteum (a membrane covering the bone) being ruptured, causing effusion of blood, tumefaction, and irritation. The bones being placed together, inflammation supervenes in the truncated ends of the bone and periosteum, lymph is thrown out in the soft parts,

callous is formed, gelatine is deposited, becoming cartilage, then phosphate of lime. The bone is then formed, and the two ends of the fracture become firmly united.

Sometimes, however, after fracture no phosphate of lime is produced, owing to some peculiarity in the constitution of the patient. In such a case a false joint may be produced, unless the two ends of the bone are rubbed together. If that should not succeed, then a seton should be passed through between them, which from its irritation has proved the most successful in exciting the deposit. When the existence of simple fracture is positively decided by the touch, and marking the crepitation, the limb should be extended until the two broken ends of the bone are placed together, and splints and bandages employed: this may be done immediately. But when there is violent inflammation present, there is no need of being in a hurry, more especially as the callous is not supposed to form before the twelfth day, at least. The violent excitement should be subdued by leeches, punctures with the lancet, &c. The limb should be placed in the splints, and even allowed to remain eight days, at the expiration of which the bones should be placed together and bandaged. There is danger of producing gangrene if too much haste is used; but in all cases we should be regulated by the inflammation and irritability of the muscles. Some time ago several cases of fracture were treated without bandage or splints, the limb being merely stretched on a cushion. Such a plan may succeed with steady men, but all patients are not so tractable, even in simple cases of fracture.

In *compound fracture* the limb should be laid out in the same way, —it may be necessary to saw off the projecting piece of bone to return the remainder. This is a better plan than making incisions; it prevents the increased irritability of the muscles, and, indeed, incisions are not necessary in one case out of 100. The limb should be placed in the splints and slightly bandaged. Fomentations and poultices ought to be applied. The most difficult thing in compound fracture, is to say when amputation should be resorted to. If there is compound fracture of the tibia or fibula (bones of the leg) with comminution, or, if an artery is wounded and cannot be properly secured, then amputation is necessary. In severe cases of compound fracture occurring to a soldier or sailor, then, also, amputation should be resorted to, as there cannot be any peace or comfort procured for them: the violent inflammation often ends in gangrene and death. The matter thrown out in compound fracture, called suppuration, prevents any callous being thrown out, because nature has too great a discharge excited already.

In comminuted fracture we hardly expect the bone to unite, yet it often occurs fragments of the bone have been removed and union ultimately effected in the usual manner. It is worthy of remark that, in severe cases of comminuted fracture, when the

patient has been afforded a chance, and dangerous symptoms have appeared, suggesting the propriety of cutting off the limb, this so called secondary amputation has seldom, if ever, proved successful. We shall next week allude to the particular fractures of bones.

MR. ABERNETHY ON THE CONNEXION BETWEEN THE LUNGS AND STOMACH.

"PEOPLE who have asthmatic lungs in town, go about the streets with their shoulders hitched up to their ears, and using every auxiliary to enlarge their chest; and the advice that is generally given is, Why take them into the country. I remember a neighbour of mine perfectly well, whom upon my life it was painful to see walk about the street, or breathe any impure air, for you would have thought it would have suffocated him. He had a house in the country; he used to get into his carriage in Bedford-row, to go to it, and as soon as he got to the end of Gray's Inn-lane, he drew in a mouthful of fresh air, and then breathed perfectly well. Now, *vice versa*, there are people, who cannot live in the country, but who come up to London, and live very comfortably here; and I remember once being a little deceived by a case of this kind, it was the case of a man whose lungs was so asthmatical that he could never lay down in his bed at night, and really his case was so distressing that his physicians advised him to go to the South of France, and winter there. He came to London, in his route to France, and, most whimsically, called upon me. I told him what I tell everybody else, that the best thing he could do was, to take care of the state of his stomach. The stomach and the lungs are supplied by the same nerves, and I shall boldly declare to you, that I believe the irritation of the lungs does proceed from the state of the *digestive organs*. I told him thus, and that was all I could say; if he chose he might attend to it. In about three weeks afterwards, he called upon me and said, I have been living in London, I have been doing as you bade me, and I have not had the least difficulty in breathing since I saw you; and I begin to doubt whether I shall go to the South of France at all; it is very inconvenient for me to go there, it is taking me away from my business, from the society of my friends, and what do you think? I said I don't know what to think, nor do I know how you are to determine, except by going back to your own residence, and seeing how you are when you get there. He went back, and egad, the very first night he got into bed in his own house, he was almost suffocated. Now, that man lived on the top of a high hill, where the air was of course fresh and pure."

SYMPATHY OF STOMACH WITH OTHER PARTS.

MIND *versus* STOMACH.

The late Mr. Abernethy, in his lecture on alimentry organs, observes on this subject, "Now with regard to the sympathies of these alimentary organs in general, that the stomach should be sympathetically affected from the state of the head, is a fact that any vulgar man is acquainted with, and which no medical man doubts, because the eighth pair of nerves proceeds directly from the brain to the stomach. But do not the bowels equally affect the brain? There is no question about it—no question about it. A very great change of feeling indeed, in the state of the mind, is produced by the relief of irritation in the bowels. The nervous system is amazingly disturbed by derangement of the bowels. I tell you a story that was told to me by a '*London Doctor*,' who was coming home from the London Tavern dinner; he felt his bowels a little uncomfortable; he had not ordered his carriage, for he thought it would do him good to walk home; he set out, but he limped and crept over the ground, and O, he was seriously uncomfortable. He found a turmoil in his bowels, which called upon him to knock at the door, and fee the servant, to be admitted to the *Cloacina;* and having cleared his bowels, *egad*, he said he jumped, and walked home with boyish alacrity.

Mind and Liver.

"Now does not the liver affect the head? O, undoubtedly: there is the strongest proof of it; but I don't say it is merely the situation of the bile, it is the nervous, the hepatic irritation. And here I call your attention to what is as old as medicine itself, for the very first physicians who taught medicine as part of the natural sciences at the different schools at Greece, were persuaded of this fact, that dejection of mind, irritability, and fidgets, were produced from something wrong in the *hypochondrium—hypochondriasis*, that was the expression they used with respect to it. Now how did those men get that knowledge? By adverting to the excretions of their patients. What came from their bowels was examined, and they saw that those discharges were not of the colour or in any respect resembling those of a healthy state. Well then, again, the very word *melancholy*, which they also used, from a fixed and settled despondency, clearly shows what was on the minds of those men, for melancholy means nothing from its greek derivative, but black bile. Now the question is, whether there is any truth in these things. For my own part, I am perfectly convinced, that hepatic irritation disturbs the head, and that therefore we, as medical men, ought to keep the functions of the liver as right as we can."

ACADEMY OF SCIENCE, PARIS.

(*Translated expressly for the* FAMILY DOCTOR.)

A Sound used in the management of mad persons.—One of the greatest obstacles which medical men have to surmount in the treatment of mad persons, is their refusal when sick to take the food or drinks prescribed for them; their obstinacy proceeds so far as to cause death from starvation; they have recourse in cases of this kind to the use of a sound, made of elastic gum, which is introduced into the stomach through the mouth or nose, every time that food or medicine is administered; but the introduction many times a-day is extremely difficult, especially when a violent resistance is made, often giving rise to serious accidents. With a view of remedying this evil, Dr. Lewrit formed the idea of constructing a sound, which when once introduced will remain in its place without much inconvenience to the patient; after many efforts he succeeded in preparing from the intestines of a sheep, a tube, possessing at one and the same time, great flexibility and great resistance; this system is practised by him, he will make the result known.

Epidemic of La Meurthe.—Dr. Gabriel made several remarks concerning a memoir recently forwarded by M. Usselon relative to the endemic and epidemic diseases of the department of La Meurthe, and particularly of Dieure and the neighbourhood. M. Usselon alluded to intermitting circumstances in these cases, which M. Gabriel said he had never met with; according to the latter, typhoid fevers in the canton of Dieure are not at all periodical; intermittent fevers, quotedian, tertian, and quartan are endemic, the cause of these intermittent fevers in the canton is owing to the great number of marshes. In the neighbouring commune of the l'Inders; the typhoid fevers are more common than intermittent; on the other hand, the county of Nonery, where there is only a small marsh, is remarkable for the frequency of typhoid fevers, which frequently become epidemic and contagious; as for intermittent fevers, they are very rare, and when any cases do appear they are very mild and yield at once to sulphate of quinine. It is not when the marsh of l'Inders is most full of water that the intermittent fevers are most frequent, but rather in moist and hot seasons; in these years animals and vegetables become more easily corrupted and more in quantity. Putrid affluvia is spread about the country in great abundance. M. Plouvice of Lille addressed a letter concerning a new method of treating epilepsy.

PHARMACY.

SYRUPS.

Syrup of Quinces.—Juice of quinces, strained, three pounds, cinnamon one drachm, cloves and ginger, of each, one drachm and a

half; let them digest for six hours, press, and add one pint of red wine; and white sugar fifteen pounds. Astringent, in loosenesses.

Syrup of Lemon Juice.—Lemon juice, rendered clear by settling and subsequent filtering, a pint; white sugar two pounds.

Syrup of Horehound.—White horehound one handful; boiling water, enough to strain a pint; infuse and strain, then add a sufficiency of sugar.

Syrup of Mulberries.—This is made in the same manner as the syrup of lemon juice.

Syrup of Poppies.—Add twenty-five drops of the tincture of opium to one ounce of simple syrup. 2. Or, poppy heads, one pound; water three pints: boil, press, and evaporate to one pint; then strain and add enough of sugar to make a syrup.

Syrup of Roses.—The petals of red, pale, or damask roses eight ounces; barley water four pints; infuse and evaporate to two pints and a half, then add six pounds of lump sugar. *Any quantity of these syrups, &c. may be made, more or less, by proportioning the ingredients.*

SYRUPS.

Syrups in general require twenty-nine ounces of sugar to the pint. They are judged to be sufficiently boiled when some taken up in a spoon pours out like oil; and when a thin skin appears on blowing upon the syrup, it is judged to be completely saturated.

ANECDOTE.

THE INFLUENCE OF MUSIC ON DISEASE.

Democritus has stated, in his writings, that many diseases are capable of being cured by the sound of a flute properly played. M. Burrette, in a dissertation on the music of the ancients, to be found in the fifteenth volume of the Memoirs of the Academy of Belles Lettres, mentions many diseases cured by this species of music: among this number he reckons quartan fevers, the plague, syncope, insanity, epilepsy, deafness, the bites of serpents; and he cites, as vouchers for these cures, the authority of many Greek and Roman authors of respectability. Marianus Capellus assures us, that fevers may be cured by appropriate songs; and Asclepiades employed the sound of a trumpet as a remedy. The Cretan Taletas delivered the Lacedemonians from the plague by the sweetness of his lyre. Do we not learn from the Holy Scripture, that David calmed the fury of Saul by the tones of his harp? Athenæus asserts, that the sound of the flute cures sciatica, with this addition, that the flute must be played in the Phrygian mode. Aulus Gellius on the contrary, recommends a soft and plaintive mode, not one of vehemence, such as the Phrygian. Cœlius Aurelianus determines even the length to which this species of enchantment should be carried; that is, till the fibres of the part begin to leap and palpitate, when the pain vanishes.

TO CORRESPONDENTS.

Well Wisher, Aberdeen.—Mucilage half an ounce, liq. potassæ fifteen drops; take at bed time. Drink plenty of linseed tea.

William Williams, Manchester.—It must be rheumatism; rub well with hartshorn and oil, and wear flannel next the part.

E. Williams.—Her complaint is inflammation of the peritoneum. We advise her to have a blister applied, and have her bowels opened. We can send her a box of pills which would answer her case, if she desires it.

John Williams, Bank Top, Manchester.—Must give up wearing tight boots; rub the swelling with acetic acid.

Constant Reader, Manchester—Hartshorn one ounce, soap liniment one ounce, mix. rub well into the back night and morning. Wear flannel.

W. C. Manchester.—Try a couple of Anderson's pills every other night. A decoction of Marsh Mallows will be found very useful, should the affection continue longer than usual.

Anxious Inquirer, Oldbury.—Have a box of pills forwarded to him suitable to his complaint, which is indigestion.

James Walker, Hunslet.—Sugar of lead, and sulphate of zinc, of each ten grains; rose water eight ounces, bathe the eye three times a day.

W. M. give up drinking; pour a jug of cold water over the head every morning, and take a table spoonful of decoction of gentian thrice a day.

Constant Reader, Rotherhithe.—Apply a blister over the stomach. R.—Pulv. opii. gr. half; ext. colocynth, gr. iv. Make into one pill; three doses, one every second night.

J. A., Bolton-le-Moors, Lancashire.—Apply a small blister over the part where the pain is felt, suck occasionally a little alum, and keep the bowels regular

H. T. Shaw.—Rub golden ointment over the sores night and morning.

Philo Musico.—Nothing could be more calculated to strengthen the lungs than moderate singing; spunging the body every morning with vinegar and water would also be highly beneficial.

William Dudley.—His case is one that would require a personal interview. We can easily send him some pills, but at the same time, advise him to procure some infusion of Peruvian bark, of which he should take a wine glass full every day at noon. Nothing could be done for the tumours without an interview.

William Foster has no right to expect us to give him advice and pay for his letter too. Same as Constant Reader, Rotherhithe.

George Pervin, Nottingham.—Pour boiling water over the bark, cover it with a cloth, let it cool, strain, and use it.

Iago can have some medicine forwarded to him by enclosing eight postage stamps; some infusion of gentian, a table spoonful thrice a day would be beneficial to him.

Z. A., Manchester, does not explain the cause of the sore nose; had better apply some golden ointment.

Poor Richard, Sheffield.—Study our article on consumption.

N.B. Medical Advice will always be given to any person (gratuitously) through the pages of the FAMILY DOCTOR; but it is necessary to give age, sex, employment, symptoms of disease, length of its duration, together with the most probable cause, or at least to describe the commencement of the attack. Any one may have advice through the above medium—viz., *answers to correspondents*, without the necessity of giving their names, or the possibility of their being made known; only, there may be questions which we shall decline answering in our pages, in which cases the patient may correspond with the editor, receiving advice until cured, on payment of 2s. 6d., as a fee, in the outset. In all cases direct to the Editor of the FAMILY DOCTOR, 4, York Cottages, St. Mark's-road, Camberwell New-road, London.

Parts 2 and 3 of the FAMILY DOCTOR, *Price 6d. each, are now ready, and may be ordered from any Bookseller.*

THE

FAMILY DOCTOR.

ILLUSTRATED.

No. 16.] SEPTEMBER 20, 1845. [PRICE 1½*d.*

ANATOMY AND PHYSIOLOGY.—THE BRAIN AND NERVES.

THE brain, looked upon from its upper or superior surface, represents a spherical or rounded body throughout the whole of its length, from back to front: it is divided into what are termed two hemispheres. The brain itself consists of three divisions: the cerebrum, or brain proper, forming the upper, or superior, and more considerable portion; the cerebellum, or little brain, forming the lower, or inferior portion, and the spinal marrow. The latter is a prolongation of the brain throughout the whole of the spinal canal, which we have already described. The external appearance and constitution of the brain are well known from last week's cut. The reader will now perceive that from the lower portion of the brain arise nine pairs of nerves, (one nerve on the right—one on the left, and hence called pairs), to be distributed over the head, throat,

and stomach. They are divided and sub-divided, again and again, amongst the muscles and skin, until they form a complete network in every part of the body which they are destined to supply, and to which they convey feeling and motion.

From the lower part of the brain and spinal marrow spring all the nerves destined to supply all the organs, membranes, muscles, and bones of the human frame. It may be as well to know that there are thirty-nine pairs of nerves in the human body; nine arise from the lower part of the brain, and hence are called cerebral. Thirty arise from the spinal marrow, and are called spinal nerves. Many Physiologists have looked upon these nerves to be similar to the strings of a harp, consequently we use still a familiar expression

(*unstrung*) when the system is low and the mind dejected. Others supposed the whitish little cords, called nerves, were similar to bow-strings, acting from tension alone; therefore, people labour under a very common mistake of calling tendons muscle nerves. Many suppose the brain to secrete a nervous fluid, called animal spirits. The latest conclusion arrived at is, that the nervous principle is electricity. Experiments have been made in which the nerves supplying the stomach have been cut asunder; all communication with the brain and stomach became suspended, — proving, in the first place, that whatever the nerves conveyed, that something was the moving power or life of digestion. Again, the stomach, through the medium of the nerves, was placed in communication with a galvanic battery, and digestion was at once resumed,—proving, in the second place, that, if the nervous influence is not electric, galvanism can, at least, supply its place. The galvanic battery has unquestionably restored to life persons who have been hung, and, but for the con-

gestion in the brain caused by suspension, no doubt the criminals might have lived.

We have little doubt as to the nervous influence being electric in its nature. We are positive as to the fact of the nerves conveying to all parts sensation and motion. The nervous system puts the heart in motion and keeps it so. It does the same with the lungs, kidneys, and liver, as well as every organ in the body: they all fulfil their functions through thr medium of the nerves. If, for instance, the nerves supplying the liver were severed, no bile would be secreted. The same applies to the glands secreting tears or saliva. The nerves, however, not only convey sensation and motion, but also impressions to the brain. Thcre are nerves of *sensation* and nerves of *motion* performing different duties altogether. Look at a *paralytic* limb,—*motion* is destroyed, or the nerves which ought to convey it have ceased to perform their duty, but the nerves of *sensation* continue to exercise their functions.

In regard to sensation, a person receiving the prick of a thorn must have the feeling conveyed to the brain before it could be perceived, nor could the instrument be removed from the hand or foot without the brain willing, and then putting into action the nerves of motion, which again bring into play the muscles themselves. That this statement is true, let a person receive a blow on the head to stun him, and what sensation is there of pinching, pricking, or even burning? What power of volition to remove from the annoyance? —none: the brain is the seat of sensation. There all impressions are received, and from thence all action and feeling spring. This is a subject we must pursue.

PRACTICE OF MEDICINE.

THE ITCH.

This disease has been vulgarly termed the scotch fiddle, and no complaint within the range of our knowledge is so excessively annoying. Yet, no sooner is it announced that such and such a person is practising upon the above-mentioned celebrated instrument, than a roar of laughter is the immediate response. It is no fun to those who are afflicted, for all that. The itch is not confined to our door, it belongs to no individual country; it is more common in France than in any country we have visited.

Cause.—It is a disease that will invariably accompany dirt, rags, poverty, and low and improper food. It is always absent when the opposites are present. Itch is the companion of poverty, and finger-post to starvation. If poverty could give the itch to society, or if it only became half so much annoying, both would disappear together, and save us the trouble of writing upon such a disease.

There are two sorts of itch:—the watery or pustulary, and the dry or scabby. It is needless to say, that the latter is the most difficult to cure, and that both are infectious.

Symptoms.—Small watery pustules appear generally first in the wrists and between the fingers, then in the breasts, thighs, &c. When the patient has become heated from walking, sitting before a fire, or lying in bed, the itching becomes intolerable. The irresistible scratching, of course, only irritates the more, and spreads the virus of the disease further, until the greater part of the body presents a universal sore.

Treatment.—Sulphur or brimstone ointment is the specific medicine in this complaint. We regret to remark here, that there are so few specific medicines known. The sulphur is used externally, as well as internally:—the external application is variously compounded.—the London Pharmacopœia gives three ounces of sulphur to eight of lard—another preparation gives one of sulphur, to two parts of lard, and a third, two ounces of sulphur to one of subcarbonate of potash, and one of lard. The best we know is, four ounces of sulphur, four drachms of white hellebore, powdered, and eight ounces of lard, together with a few drops of bergamot oil, to subdue the offensive smell of the sulphur. Previous to the ointment being applied, the warm bath should be used, and the parts affected, well rubbed with soap. The sulphur should then be smeared over the parts where the eruption exists. Old garments of any kind should be used, and the patient should lay aside his watch, if he has got one, or any metal, lest they become covered with the sulphur, and turned as yellow, but not as valuable, as gold. The smearing should be repeated night and morning, and after an interval of a few days, the patient should take another warm bath, and apply the ointment until no more eruptions appear.

In a simple case, about the bulk of a nutmeg should be rubbed in at bed-time, on the fingers, breast, &c. Gloves should be worn, to protect the bed-clothes, and keep the sulphur close to the part affected.

Precautions.—It will be necessary to be fully assured that the complaint is itch, otherwise, serious mischief may be produced, by arresting an eruption the pure effect of nature, and the suppression of which may do serious mischief. The patient should, if of a full habit of body, be moderately well purged previous to the use of sulphur. The bowels should be kept open during the application, by means of flour of brimstone and treacle; care should be taken to avoid cold; no mercurial ointment should be employed.

We have always known the sulphur to effect a cure, except in a case in which we had to send the patient to Harrogate, where, in eight days, he got rid of his troublesome companion.

It has been stated, that chloruret of lime has been successfully employed in foreign practice. The quantity used, was one ounce and a half to one pound of water, rubbed in three or four times every

day. For children, one ounce of the lime is enough. The warm bath must be taken every day, to remove the chalky crust left on the skin, by the use of the lime. We have not tried this, but offer it as a suggestion, pinning our faith in the meantime, to the sulphur ointment, warm bath, and attention to the bowels.

DORSET AND WILTS.

AREA 1,407,913.

Popul.	Agricul.	Manufac.	Others.	Families.
373,797	37,243	24,005	18,940	80,188

DEATHS

Under 5 yrs.		13 to 21		50 to 60		70 to 80		above 90 to 95		
M.	F.	M.	F.	M.	F.	M.	F.		M.	F.
836	706	25	29	26	27	65	61	„	28	36
334	321	28	25	16	25	39	47	„		28
167	207	24	31	25	35	47	51	„		—
121	144	29	36	22	22	48	52	„		64
82	99	24	37	21	29	47	56	Unknown		16
46	61	28	36	22	23	44	47			
		27	46	24	34	51	52	Total		8,557
1,586	1,538	36	45	21	24	66	44			
1,538		38	42	26	24	51	45			
				29	21	31	31			
3,124		259	321	35	56	44	36			
			259							
				247	314	533	522			
			580		247		533			
					561		1,055			

CAUSES OF DEATH.

Epidemic	765	Typhus	202
Nervous	408	Convulsions	128
Respiratory	927	Consumption	718
Digestive	233		

VARIOUS.

Locomotion	21	Violent Death	99
Circulation	40	Old Age	335
Child Bed	33		
	Total		3546

CAMBRIDGE, HUNTINGDON, AND PART OF LINCOLN.

AREA 1,295,379.

Popul.	Agricul.	Manufac.	Others.	Families.
311,714	35,105	18,813	13,436	67,354

DEATHS

Under 5 yrs.		13 to 21		50 to 60		70 to 80		above	90 to 98	
M.	F.	M.	F.	M.	F.	M.	F.		M.	F.
1,043	831	18	2	22	23	19	37	„	18	23
256	218	15	22	18	16	21	27	„		18
137	115	19	18	20	14	37	25	„	—	
80	78	20	28	20	16	30	14	„	41	
64	53	18	35	15	12	30	28	Unknown		12
52	49	23	21	22	24	41	18			
		20	31	26	17	40	21	Total		6,872
1,632	1,344	21	27	16	11	42	42			
1,344		26	40	25	14	29	18			
				25	14	20	27			
2,976		178	244	28	20	24	32			
			178							
				237	181	333	289			
			422	181		289				
				418		622				

CAUSES OF DEATH.

Epidemic	541	Typhus	167
Nervous	377	Convulsions	216
Respiratory	778	Consumption	585
Digestive	209		

VARIOUS.

Locomotion	19	Violent Death	103
Circulation	16	Old Age	265
Child Bed	13		
	Total		3048

DISEASES FROM POINTING NEEDLES.

A method has recently been adopted with much advantage by the pointers of needles, of suspending a magnet over the work, so as to attract the minute particles of steel, immediately as they fly off from the needles; and it has been ascertained that this simple invention will have the effect of preventing consumption of the lungs from this cause, among needle-manufacturers. It is well-known that the lungs of the persons employed in this business, as well as those of flax-dressers, are particularly liable to inflammation from the entrance of the minute particles of the materials they work upon. These particles continually float in that part of the atmosphere which they are under the necessity of inhaling.

PARIS.

ACADEMY OF SCIENCES, 8TH SEPTEMBER.

(*Translated expressly for the* FAMILY DOCTOR.)

Medical Science. M. Bourgery concluded the reading of the memoir he had commenced on the previous sitting. This memoir is only the first part of a great work which the author has undertaken, to prove the existence of nerves in serous membranes. He purposes in the outset, to establish the fact, that serous membranes, which so many anatomists imagine are completely divested of nerves, are in reality, the very tissues which contain most of them. He in particular alluded, in his memoir, to the disposition of nerves in the peritoneum. In succeeding memoirs he will pursue his researches throughout all the serous membranes of the body.

Fossil teeth of a Monkey. The perpetual secretary, M. Arago, read a very interesting communication from Professor Richard Owen, of London, on fossil teeth, belonging to an animal of the monkey tribe. No such fossils have hitherto been found.

Animal Electricity. M. Matteucci presented the results of the new experiments he had made, regarding the electricity of the Torpedo. This gentleman has long since established, that the discharge of the torpedo only occurs through a curve existing between the back and the lower part of the belly. Many authors persist in declaring that the fish being isolated, a discharge may be obtained, by touching it anywhere with a conductor.

M. Mattuecci having repeated his experiments, the result is agreeable in all points to his previous ones, and the question effectually put to rest.

M. Lionet, a doctor at Cobeil, forwarded several sealed papers relative to hysteria, and also one relative to the treatment of croup.

JOKES FOR INVALIDS.—ABSORPTION.

WHEN a wen exists on the neck, medicines, such as iodine, are employed to stimulate the minute ends of certain vessels called *absorbents*. The result is that they imperceptibly remove the accumulated substance, restoring the surface to a slender genteel level.

Case.—An old English gentleman, afflicted with a enlarged purse, sent his son, from Oxford, to spend his first season in London. He supplied him with an unlimited quantity of a very exciting article called *checks* upon his banker.

The stimulus of town life created such an activity amongst these bank absorbents, that the old gentlemen soon discovered that, that vulgar excrescence, known as a banker's account, was so far reduced as to leave Dr. and Cr., on the most natural and respectable level they were capable of reaching.

DIALOGUE.

THE WEAVER.

"AH! good morning, friend. Do you want bleeding now?"

"No, sir, thank you. I got the right sort of physic to prevent that."

"Good. I expected as much. Will you now inform me of the most prevalent diseases amongst the hand-loom weavers?"

"Why, sir, you found out the principal, I believe, when you prescribed for the last; but competition between the hand and the power-loom has brought out others. Lengthened hours of labour and small returns make sad inroads."

"True; but describe in a medical point of view those symptoms you are most familiar with."

"The chief symtoms, according to my own experience, are great depression in the morning, little appetite, (if we had enough to eat, mind), belching, sour stomach, great weakness, and a sort of feeling, Doctor, as if the stamina of life was well-nigh snapped asunder."

"Are you nervous?"

"Aye, no doubt,—starting at the least surprise."

"Do you feel faint-hearted?"

"Well, I must confess I feel faint-hearted at many things that would not once have troubled me any more than breaking a reed."

"Is your sleep undisturbed?"

"Very far from it;—broken with confused and hungry dreams. I often dream I am eating hearty meals."

"How do you feel on your limbs?"

"Not so strong as I used to do: I am more shaky all over."

"Have you cramp?"

"Aye, very often."

"Is your eye-sight good?"

"Fast failing, I may well say."

"Are you sickish at times?"

"Aye, aye; my heart often turns; and I think I am going to faint or sink away."

"Of course, then, you are thinner?"

"And paler, too, Doctor."

"Is your mind changed in its strength?"

"Weaker, Doctor, weaker; more crouching—more submissive in spirit."

"But not more disposed to live and let live,—not more christian in spirit, or loving to your neighbour?"

"Why, how *you do* talk, Doctor; live and let live. I wish it was the christian law. I shan't say much of that, though; but I feel strange at times when I awake and know I have not the amount of food a beast gets. I shall say no more; but if the world was on fire I should laugh heartier than I have done for thirty years."

"I see it all friend. I comprehend the immensity of the evil which has estranged you from society. You are hunted, goaded, wronged and desperate: through physical suffering, mental and moral rectitude have been assailed. I can bring all down to the one point;—want, then suffering, then disease, then death and gloomy hate,—then revenge, revolt, defeat,—the scaffold and death."

"Do you see all that, Doctor, and not attempt to remedy it?"

"I wish to heaven I could!—I cannot. You may throw your case upon me. It does not belong to me. Is it not within the compass my profession?—I wish it was."

"Thank you for that."

"You need not. What can I do? Hear me for a moment. You are forced to rise early, to enter a workshop—a room perfectly abominable with the smell of different stuffs, oil, rancid tallow, or sour paste. Is that a provocative to the appetite like the sweet breeze that gushes over the flowery knoll, or wafts the scent of the new mown hay, or buffets the waivy corn—no, no, no!—nature grows sick, faint, and failing. There, however, you toil the live-long day, conscious that wages are an insult to your worth. Does that sooth the mind? Then you are fixed on a hard bench and bring only into play certain muscles, whilst the sedentary occupation retards the circulation, and there is no pure atmosphere to renovate the blood. Do these things influence mind or body, or bring one of the organs to perform its proper functions? Above all, is there any sustaining food at hand to supply the want of those powers which nature prizes so much?—no. You are in an artificial state and reduced to poverty, thereby deprived of those artificial supports your worn out and exhausted system so much requires. I might converse with you a whole day on the doubly distilled evils of your condition, but my time is limited! I attribute to want, overwork, long application, and insufficient lodging and clothing, the manifold afflictions which crush the hand-loom weaver into the dust, which upset his stomach, which weaken his mind, which unhinge the powers of nature, which stint his faculties, deaden his perceptions, disease his body, and cast a shadow and a gloom on the path of his industrious life, which has no other finger-post to guide the weary traveller, save that which points to the grave as the poor man's last and only friend!"

"That is God's truth, sir."

DISEASES FROM TIN.

The inconveniences which happen to pewterers, enamellers, and all those that are anywise employed in the melting of tin, either by itself or along with metals, proceed chiefly from the particles of arsenic which it contains, and will be more properly noticed when we come to the effects of that metal.

CHEMISTRY.

HYDROGEN GAS.

THIS gas was formerly termed *inflammable air* from its combustibility, and *phlogiston* from the supposition that it was the matter of heat. Its present name is derived from the Greek. It is commonly and easily procured by putting pieces of zinc into dilute sulphuric acid, formed of one part of strong acid and four or five of water, effervescence ensues, and the gas is rapidly evolved. The hydrogen thus obtained, is not exactly pure; the zinc of commerce containing always sulphur, together with some traces of charcoal; in consequence of which it is contaminated with sulphuretted hydrogen. A little metallic zinc is also contained in it, apparently in combination with hydrogen. A solution of pure potash may free it from these impurities, except the carburetted hydrogen. It is a colourless gas, having neither odour nor taste when perfectly pure. It is a powerful refractor of light. It cannot be resolved into more simple parts, or be compressed into a liquid. It is the lightest body in nature, and consequently, the best material for filling balloons from its extreme lightness. It is difficult to ascertain its precise density by weight, owing to the presence of minute quantities of common air and watery vapour. It may be computed from the composition of water to be 16 times lighter than oxygen. And its specific gravity will accordingly amount to 0.0.694. Hydrogen gas does not change the blue colour of vegetables ; is sparingly absorbed by water, 100 cubic inches of that liquid dissolving about one and a half of the gas. It cannot support respiration, for an animal soon perishes when confined in it. Death ensues rather from the want of oxygen than the deleterious effects of hydrogen, since an atmosphere, composed of due quantities of hydrogen and oxygen, may be respired without any inconvenience being felt. Nor is it a supporter of combustion ; for a lighted candle is instantly extinguished when introduced into a jar containing the gas. It is inflammable to a high degree : for, though it extinguishes the candle, it burns alone if in contact with air. The combustion thus conducted goes on tranquilly, attendedwith a yellowish blue flame, and a veryfeeble light. But when the light is introduced to the gas, previously mixed, in equal (two measures hydrogen to five or six air) proportions of atmospheric air, the whole is instantaneously kindled, and a flash of light precedes a violent explosion. If oxygen is used instead of air in the quantities of one measure of the former to two of the latter, the explosion is far more violent. Oxygen and hydrogen gases cannot combine even at ordinary temperatures, and may be kept in contact without even gradual combination ensuing. Hydrogen may be set on fire whilst in contact with oxygen or air. Platinum becomes red hot from a jet of hydrogen, and afterwards inflames the gas. It does not explode, however, if mixed with 12 times its volume of air, 14 of oxygen, or 9 of hydrogen ; or when

expanded by diminished pressure to 16 times its bulk. Sir H. Davy observed, that oxygen and hydrogen gases unite slowly when exposed to a temperature above the boiling point of mercury, and below that at which gas begins to appear luminous in the dark. A large quantity of caloric is evolved during the combustion of hydrogen gas; one pound causing as much heat in burning as is sufficient to melt 295.6 pounds of ice. Dr. Dalton 320 pounds, and Dr. Crawford at 480. The most intense heat that can be produced is caused by the combustion of hydrogen in oxygen gas. Dr. Hare, of Philadelphia, who first burned hydrogen for this purpose, collected the gas in separate gas holders, through which a stream was made to issue communicating with each other just before their termination. At this point the jet of the mixed gases was inflamed. The effect is greater by forcing the gases in due proportion into a strong metallic vessel, and setting fire to a jet of the mixture as it issues. An apparatus of this kind is now known under the name of the oxy-hydrogen blow-pipe. This apparatus is, however, dangerous, as the flame may run back, conjoin with the gas in the reservoir, and set fire to the whole at once; unless a succession of this wire gauze is fixed within the exit of the tube, causing the gas as it issues from the reservior, to pass through a cylinder full of oil, or water, before reaching the place where it is to burn. Water is thesole product of the combustion of hydrogen gas. For this important fact we are indebted to Mr. Cavendish. He demonstrated it by burning oxygen and hydrogen gases in a dry glass vessel, when a quantity of pure water is generated, exactly equal in weight to the gases which had disappeared.

The composition of water was demonstrated very satisfactorily by Messrs. Nicholson and Carlisle, in their researches on the chemical agency of galvanism: on resolving water into its elements by this agent, and collecting them in separate vessels. They obtained precisely two measures of hydrogen and one of oxygen; a result which has been fully confirmed by subsequent experiments. Gay Lussac and Humbolt found that when a mixture of oxygen and hydrogen is inflamed by the electric spark, those gases always unite in the ratio of one to two, whatever may be their relative quantity in the mixture. When one measure of oxygen is mixed with three of hydrogen, one measure of hydrogen remains after the explosion, and a mixture of two measures of oxygen and two of hydrogen, leaves one measure of oxygen. But when one volume of oxygen is mixed with two of hydrogen, both gases, if quite pure, disappear entirely on the electric spark being passed through them. Berzillius and Dulong, dexterous operators, acting on a sound principle by three careful experiments, found that 100 parts of water consist of 88.9 of oxygen, and 11.1 hydrogen: hence the constitution of water by weight and measure will be:—

	By weight.	By volume.
Oxygen	8	1
Hydrogen	1	2

These are the data from which it was inferred that oxygen gas is just 16 times heavier than hydrogen. Iron at a red heat decomposes water, the oxygen of that liquid combining with the metal, and the hydrogen gas is set free. For every 9 grs. of water decomposed, 1 gr. of hydrogen will be set free. Zinc decomposes pure water at common temperatures, slowly; but, as soon as sulphuric acid is added, decomposition of the water takes place rapidly, though the acid merely unites with the oxide of zinc. It will be now clear that the hydrogen is derived from the water, as of all the ingredients used for the purpose of obtaining hydrogen, water alone contains it. Zinc combines with oxygen and oxide of zinc with the acid, overcoming the attractions of oxygen and hydrogen.

COLUMN FOR THE TRADES.

DISEASES FROM IRON.

During the forging and hammering of iron, the scales which fly off frequently get into the workman's eyes, and if not quickly dislodged, occasion great inflammation and pain.

PREVENTION.

The common methods of removing them are, washing the eyes with cold water, or picking them out with a needle, in performing of which some workmen are very dexterous; but these methods sometimes fail, in which case, recourse must be had to the magnet, which will frequently succeed, and is then found the easiest and most expeditious extractor.

REMEDIES.

If any inflammation should remain, the eye may be washed afterwards with a cooling eye water, made by dissolving fifteen grains of zinc or white vitriol in half a pint of cold water.

DISEASES FROM POLISHING IRON, &c.

The disorders of grinders of iron, being produced by the particles of the stones, and not of the metal (in the same way as those of the men who break stones and flints on the road-side), are to be prevented, as far as the eye is concerned, by wearing a piece of net lace over the rims of a pair of spectacles, so as to form a hollow or concave surface next the eye. Polishers and steel grinders, from the great use of emery and oil, are very subject to indisposition of the stomach and bowels. The general symptoms are oppressions of the stomach, costiveness, and frequently pains in the bowels; but they are easily removed by a gentle vomit; giving the next morning some opening physic, and taking plentifully of broths, &c.

PHARMACY.

ELECTUARIES.

Electuary for the Worms.—Powdered tin three ounces; syrup of roses (or even treacle) half an ounce; simple syrup a sufficient quantity; dose, a tablespoonful every morning for three days, to be succeeded by a brisk purge.

2. *Or, Electuary or Cowhage.*—Cowhage pods scraped into syrup, till they render it thick as honey: dose, a teaspoonful in the morning fasting, as a vermifuge, a purge being given a day or two afterwards.

Electuary for the Piles.—Take flour of sulphur half an ounce; lenitive electuary two ounces; nitre three drachms; syrup of orange peel: dose, the size of an ordinary-sized nutmeg, three or four times a day.

Electuary for a Cough.—Spermaceti two drachms; tragacanth powder one drachm; syrup of poppies and syrup of Tolu, of each two drachms; confection of roses six drachms; nitre half a drachm: dose, size of a nutmeg, frequently.

Electuary in Retention or Suppression of the periodical Discharge.—Myrrh one scruple; ammoniated iron six grains; syrup of ginger, enough; size of a nutmeg, twice a day.

PILLS.

Stomachic and Laxative Pills.—Rhubarb in powder one ounce; soccotrine aloes six drachms; myrrh half an ounce; oil of peppermint half a drachm; syrup of orange peel, enough to form the mass: to be made into pills of five grains each; four of which may be taken twice a day.

Composing Pills.—Purified opium half a drachm; extract of liquorice or Spanish soap two drachms: make thirty pills, one of which may be taken at bed-time, as occasion may require.

Calomel Pills.—Calomel three grains: jalap nine grains; mucilage of gum Arabic, enough to form three pills: to be taken at bed-time. Cathartic.

Worm Pills.—Gamboge eight grains; calomel five grains: make into a pill with mucilage of gum Arabic, for one morning dose.

Cathartic Pills.—Compound extract of colocynth one drachm; opium in powder three grains; oil of nutmegs six drops: make twelve pills: dose, two every hour, until two stools be obtained: or,

Calomel ten grains; gamboge pill, with compound extract of colocynth, of each fifteen grains; syrup of ginger, enough to make the whole into twelve pills: two to be taken night or morning when costive.

EMULSIONS.

Camphorated Emulsion.—Gum Arabic two drachms sweet almonds two drachms, lump sugar one drachm, water four ounces. Do. stimulating.

Almond Milk.—Sweet almonds one ounce, bitter almonds, white sugar two pounds, distilled water two pints, orange flower water two drachms; the bitter almonds improve the flavour. Or confection of almonds one ounce, distilled water one pint. Pectoral affections of chest.

Emulsion of Gum Arabic.—Gum Arabic two drachms, sweet almonds and lump sugar, of each half a dramch, barley water one pint. For catarrh.

Oil of Almonds Emulsion.—Oil of almonds one ounce, gum Arabic in powder a drachm, simple syrup one ounce, rose water one ounce and a half. In coughs.

Simple Syrup.—Sugar twenty-nine ounces to a pint of water.

Syrup of Marshmallows.—Fresh roots of marshmallows one pound, water one gallon, boil to one half, press out the liquor, let it settle, and add four pounds of white sugar, and boil to six pints. Demulcent in tickling coughs.

Syrup of Orange Peel.—Yellow part of Seville orange, two ounces, boiling water one pint; steep for a night, decant, and add three pounds of fine sugar.

Syrup of Horse-radish.—Juice of horse-radish, a sufficient quantity, and sugar enough to make a syrup; a spoonful swallowed slowly removes hoarseness immediately.

Pectoral Syrup. Syrup of Capillaire.—Maidenhair five ounces, liquorice root two ounces, boiling water six pints; steep for six hours, then strain and add three pounds of white sugar. In coughs, &c.

Syrup of Saffron.—Saffron hay one ounce, canary wine one pint, infuse for three days, prees and add a sufficient quantity of sugar (it may also be made with water instead of wine).

DOCTOR OUTWITTED.

A short time since, a respectable medical practitioner, not a hundred miles from Ludlow, was called up in the night by a labouring man, residing at a few miles distant, to attend his wife, who was in child-bed. Mr. W., who had often attended under similar circumstances, without obtaining any remuneration, asked the man who was to pay him. The countryman said he possessed five pounds, which, kill or cure, should be his reward. Mr. W. consequently paid every attention to the poor woman, who, notwithstanding, died under his hands. Soon after her death, Mr. W. met the widower at Ludlow, and observed that he had an account against him. The man appeared to be greatly surprised, and inquired for what. On being informed, he replied, "I don't think I owe you anything; did you cure my wife?" "No, certainly," said the accoucheur, "it was not in the power of medicine to cure her." "Did you kill her then?" asked the countryman. "No, I did not," was the reply. "Why then," said the countryman, "as you did not either kill or cure, you are not entitled to the reward," and walked away.

TO CORRESPONDENTS.

C. E., Working Chemist.—We have been much annoyed with the black ink throwing down a deposit. A clove or two will prevent any crust forming. Red ink throws no deposit at all, which we attribute to the aqua ammonia it contains. We do not exactly understand his other question; if he wants a plate powder we can furnish him with it. Write explicitly.

E. B. J., Leeds.—The decoction of Marsh-mallows is decidedly the best thing to stop the discharge complained of. Use it as a wash thrice a day, or as an injection. The bowels during the application must be kept open, and the diet low; after that is cured persevere with the oil of turpentine, and employ a clyster of olive oil one day afterwards, mixing, say half an ounce of the oil with about a pint of gruel. Drink plenty of linseed-tea or barley-water. We know that the turpentine has a most violent action, but the drink will relieve the effect.

Henry Greene must not fill his head with the idea of a rupture. He supplied us with no fact to lead us to suppose such was the case. As to the possibility of being cured, we are afraid his own fears and doubts of ever being well, alone stand in the way. Supply the required address as soon as convenient.

Julia.—We certainly cannot advise any stronger remedy for hairs on the face than having them plucked out; but there can be no doubt that if it is not effectually done, the more they are meddled with the more they will grow. The cerate ointment would relieve the irritation produced. Preparations of lime are used for the purpose, but require continued application without beautifying the complexion. What harm can the hairs do? What deformity will they produce?

T. G. N. I. E. N. T. N.—His complaint must be a nervous one, and no doubt the sensations described spring greatly from his trade as a shoemaker. Take, when necessary, four grains of ext. of colocynth, and a wine-glassful of salts in the morning. Try the cold water dash over the head and see the result, for according to his statement, it would be difficult to tell whether that or a flannel nightcap would answer best: above all, take fifteen grains of carbonate of iron, every day at noon, before dinner, and write again.

R. P.—1st. Take one oz. mucilage, one drachm and a half of syrup of squills, the juice of a lemon, camphorated water four ounces, sweeten with liquorice juice, and use a tea-spoonful when the cough is troublesome. 2nd. Mix one dr. of tincture of cardamoms, fifteen drops of ipecacuanha wine, and as much flour of brimstone as will lie on a shilling, with a glass of ginger wine, or elder-flower wine. Take this at bed-time, say twice a week, and look to the bowels. Let them not be costive.

J. P. L.—We presume he has continued the sponging as ordered. Let him go on. Try — Pulv. opii. opt. Gr. ½ made into a pill with the electuary of roses. Take one twice a week for a fortnight. It is foolish to despond as it makes matters worse.

J. X. and Y.—Perfectly astound us. Does he suppose for a single moment that any medical man would criminate himself, or be a party to what he desires. He had better put the question personally, and see the result.

Adam the Dutchman.—The cause is given, and the remedy is the open air; but he may ask how is he to get it. Nothing can prevent him inhaling the fumes of the spirit of tar. Nothing, save the pure air can counteract it. The debility, however, produced may be removed by snuffing up a little spirit into the nostrils; but more especially, by taking a table spoonful of infusion of peruvian bark, once or twice a day. Cold water dashed on the face morning and night, is also beneficial. The hands should be washed well every night, and the working clothes laid aside as soon as possible. Perfect ventilation through the workshop would be one of the first things we should aim at. I wish the symptoms had been clearly described. That is *how* the tar affects his system.

James Hoskins.—The trade again. Take as much exercise out of town as possible. Keep the bowels regular, and drink a wine-glass full, of weak infusion of gentian every day before dinner.

X. X. X.—Should give some private address, or arrange it so as to receive a private answer.

Subscriber, Bristol.—The yolk of eggs should be rubbed into the root of the hair until you, or some one else, or both are tired. After that wash the whole head, that is, scrub it with a hair-brush in luke-warm water, in which a piece of soda, the size of a walnut has been thrown. Every night and morning after the above operation, rub hard for a quarter of an hour with a hard hair-brush, or until the head is in a perfect glow.

W. W.—Three letters under the above signature were answered in the last. We cannot refer to them as they were burned immediately. If his complaint is dry scurvy, see our article on scurvy, where we recommend the golden ointment to be rubbed in each sore, and washed off night and morning with common soap and water. He must eat plenty of vegetables, and use acid in his drinks, such as lemon juice or tartaric acid. He may also use an infusion of sarsaparilla with great advantage; say a wine-glass-ful thrice a-day.

R. T. W. G. Barhead, Scotland.—R. Extr. Colocynth: Gr. iv. Pil. Hydrg: Gr. ij: make into one pill; procure six doses, and take one every third night; also buy a few chips of *quassia*, pour over them in a jug a pint of boiling water as you would do with tea. Cover up the jug with a cloth. Let the infusion cool, then pour off and bottle. Take a tablespoonful of this infusion every day, morning and noon, and add every time to the tablespoonful a small quantity of carbonate of soda: say half a teaspoonful. Take moderate exercise, and sufficient rest before and after meals.

W. H. S., Leicester.—Nothing could displace braces except an elastic band for the trousers, and that FASHION would not very hastily admit or tolerate. In the meantime the elastic brace without any buckles, or these very low down, are the only substitute. An elastic band could easily be made, and prove as easy to us, and much more graceful than the fashion of our Grandfather who dispensed with such restrains pretty generally.

B. Marshall, Rochdale.—We wish him to continue the same treatment a little longer, as the effect cannot be made apparent so soon. After which we shall address him privately.

Magdalen.—Cannot refer to the letter, or letters. There may have been two signatures alike. The body should be sponged with cold water in her ease, in which a teaspoonful of muriatic acid has been thrown. The above quantity of acid will be enough for half a pailful. Magdalen will know at what periods to omit the sponging. Take also, occasionally, one of the following pills: R. Pulv. opii., gr. ¼; ext. colocynth, gr. iii. Make into one pill. Six doses. Drink also a glass of gin or port-wine into which five drops of tinct. cantharid have been measured, every second evening at bedtime.

Poor Jack.—Nothing can serve such a speedy notice upon the tape-worm to quit the premises as taking one ounce of spirits of turpentine: Drink linseed tea afterwards.

A number of letters arrived this morning (Wednesday) as we were going to press, and could not be answered this week. Two letters came *unpaid* which are returned, as we intend to do with all unpaid letters in future.

Notice.—If our correspondents would add some distinct name or place after their initials it would prevent mistakes.

Several parties having expressed a desire to have their prescriptions made up and forwarded to them by post we have complied with their request, and shall do so on all occasions; thereby pledging ourselves for the genuine nature of the medicines, their cheapness and utility. Anything that can be forwarded by post, according to the regulations printed at the General Post-office, will be punctually sent to the parties desiring us to do so. Postage stamps will answer in the shape of payment.

N.B. Medical Advice will always be given to any person (gratuitously) through the pages of the FAMILY DOCTOR; but it is necessary to give age, sex, employment, symptoms of disease, length of its duration, together with the most probable cause, or at least to describe the commencement of the attack. Any one may have advice through the above medium—viz., *answers to correspondents*, without the necessity of giving their names, or the possibility of their being made known; only, there may be questions which we shall decline answering in our pages, in which cases the patient may correspond with the editor, receiving advice until cured, on payment of 2s. 6d., as a fee, in the outset. In all cases direct to the Editor of the FAMILY DOCTOR, 4, York Cottages, St. Mark's-road, Camberwell New-road, London.

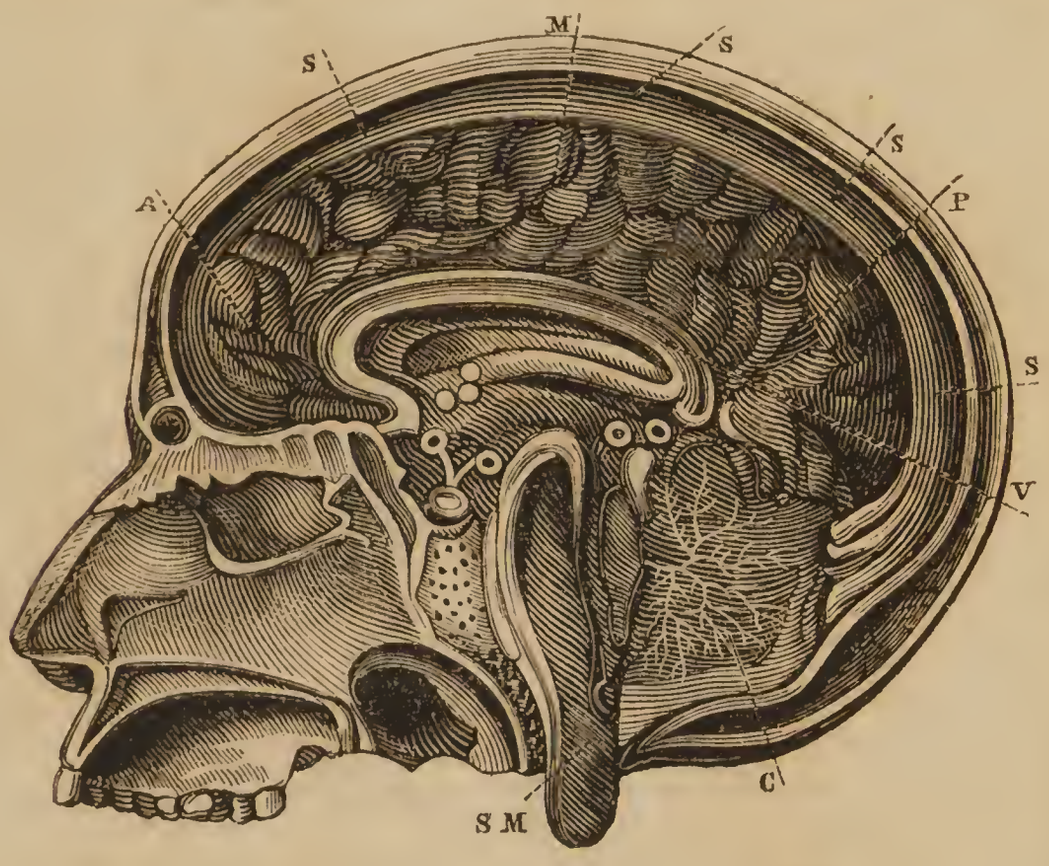
Parts 2 and 3 of the FAMILY DOCTOR, *Price 6d. each, are now ready, and may be ordered from any Bookseller.*

THE

FAMILY DOCTOR.

ILLUSTRATED.

No. 17.] SEPTEMBER 27, 1845. [PRICE 1½*d.*



ANATOMY AND PHYSIOLOGY.—SECTION OF THE HEAD.

In the above design we wish to present the reader with the view of the head, when divided lengthways into halves. The letter **A** represents the anterior or front lobe of the brain. The letter M the middle lobe, and the letter P the posterior or back lobe. The appearance and coverings of the brain proper we have previously described, but when alluding to the *dura mater* or external membrane, we spoke of the sinuses formed by it. On reference to the figures S S S S, the reader will perceive the superior longitudinal sinus, but he must not suppose that is the only one. There are many sinuses formed by that membrane.

The letter B will represent one of the ventricles, of which there are four : they are cavities in the brain itself, to which we shall allude presently.

C represents the cerebellum or little brain, and S M the spinal marrow. The little brain situated at the lower and back part of the head, occupies a prominent place in the list of Phrenological bumps, and possesses great interest and importance in the animal economy. Its appearance is angular, and very much like the section of a fern root, which presents the outline of an oak tree. From this singularity it is termed the tree of life; and as the reader is aware, from the lower parts of the cerebellum, arise a number of nerves performing important functions, such as supplying the nose with sensitiveness,

and giving to the stomach its sense of hunger and power of digestion. Respiration and the operation of the senses are carried on by these nerves springing from this so called tree of life.

The reader having now possessed himself of the general anatomical structure of the brain, we cannot avoid alluding here to the celebrated work of M. Magendie, the distinguished French physiologist. He says, I have ascertained that there exists in the cavity of the cranium (skull) and spine, a liquid, in the midst of which the brain, spinal marrow, and origins of all the nerves are immersed. This liquid belongs to the most perfect state of health, and is several ounces in quantity. He asks if this is the animal spirit of the ancients, or the nervous fluid of the moderns. In an adult man (we presume a criminal) of middle stature, and in the enjoyment of all his faculties, mental and physical, he ascertained that the quantity was about three ounces. In women it is greater, and in old persons still more

considerable, being six or seven ounces. This fluid differs in depth of layer. In the brain one or two lines; in the neck four or five; and in the loins more than an inch. The study of this fluid led the philosopher to a singular and unexpected discovery with regard to the brain. The dimensions of the brain have been considered not to vary at all. But he found that the brain changes its volume like other organs. In diseases where the body is much emaciated, the brain is also diminished; and the invalid, who cannot walk, from the disappearance of the muscles of his limbs, may also attribute mental weakness to diminution of the size of the brain: one of the uses of the fluid then seems to be to replace the brain when it diminishes in volume. In cases of persons having contracted and immovable limbs for many years, and in whom a fourth or fifth part of one of the cerebral lobes had disappeared, the depression was filled with this fluid so that the cranium was always full. He next by experiments on lower animals, sought to ascertain the influence of this fluid on life. He made a puncture in the neck of an old and fierce fox by which it was deprived of fluid. In a moment the ferocious animal became calm, made no attempt to bite, and lay motionless. He was set at liberty in the garden, but never moved until the following morning. He then moved a few steps with confidence. In thirty-six hours he attempted to bite and make his escape: on examination by a fresh puncture, it was ascertained that the fluid was restored. In very young infants, a pouch, filled with fluid sometimes appears at the lower part of the spine, where this fluid naturally exists in great quantity. Should this bag burst and the fluid escape, death speedily ensues. Thus in man and animals the contact of this liquid with the surface of the brain is of vast consequence to the perfection of the nervous functions and even of life itself. To ascertain if mere fluid was necessary, or if there was a chemical property in this liquid, distilled water of equal temperature supplied its place in an animal. But it became distressed, its movements perverted, and it lost all its instincts and habits. These phenomena, however, ceased on allowing the water to escape. On making another experiment with cold water, the animal was seized with trembling, analogous to that which precedes intermittent fevers. He considers then, that this fluid influenced the functions of the nervous system, firstly by contact with the surface of the brain and spinal marrow; secondly by its chemical composition; thirdly by its temperature, and that for its utility in the animal economy this fluid should be ranked along with blood. The next thing to ascertain was, what influence this liquid had on the intellectual faculties of man.

[*To be Continued.*]

STATISTICS OF MORTALITY.

MINING PART OF SALOP, STAFFORD, AND WORCESTER.

AREA 140,798.

Popul.	Agricul.	Manufac.	Others.	Total.
223,457	3,168	25,898	13,669	42,735

DEATHS

Under 5 yrs.		13 to 21		50 to 60		70 to 80		above 90 to 101		
M.	F.	M.	F.	M.	F.	M.	F.		M.	F.
1,015	795	18	10	29	11	14	22	„	8	25
423	451	13	13	12	12	12	11	„		8
199	213	14	7	19	9	15	18	„		—
104	123	13	17	22	14	16	20	„		23
77	70	12	17	16	13	19	25	Unknown		3
52	53	21	16	22	17	21	19			
		22	26	21	16	16	11	Total 6,444		
1,870	1,705	26	25	24	20	17	14			
1,705		18	23	17	17	17	18			
				16	13	16	7			
3,575		157	154	28	21	17	23			
			154							
				226	163	180	188			
			311	163			180			
				389			368			

CAUSES OF DEATH.

Epidemic	844	Typhus	176
Nervous	272	Convulsions	165
Respiratory	647	Consumption	447
Digestive	319		

VARIOUS.

Locomotion	14	Child Bed	13
Circulation	21	Violent Death	185
Old Age	191		
	Total		2,929

COUGH WHICH PRECEDES CONSUMPTION.

This cough is laborious to the best, is short, and by exertion produces phlegm: it is increased by the slightest cold—and by those increases becomes worse, until at last the lungs become diseased, and then adieu to physic;—it is attended with a wasting of the body, short breathing, peculiar thinness of the face and hollowness of the eyes, and perspiration becomes profuse.

MEDICAL PROPERTIES OF GRAPES.

The ripe fruit of the vine is a cooling antiseptic, and when eaten in large quantities, diarrhœtic and laxative. Grapes are very useful in febrile diseases, particularly in bilious and putrid fevers, dysentery, an all inflammatory affections. In Syria, the juice of ripe grapes inspissated, is used in great quantities in the above diseases. Grapes have been strongly recommended as an article of common diet in phthisis, and they certainly contain much bland nutritious matter, well fitted for consumptive habits. Raisins are more laxative than the fresh fruit, and are apt to prove flatulent when eaten in any considerable quantity.

PHARMACY.

COMPOUND TINCTURE OF CAMPHOR.

[This is known to the public by the familiar title of PAREGORIC ELIXIR.]

Take of benzoic acid (also called flowers of benjamin) one drachm, of the best gum opium cut into small pieces one drachm, camphor two scruples, oil of aniseed twenty drops, rectified spirit of wine one pint and a half, pure water half a pint. Put the whole of these in a well-corked bottle; shake the mixture once every day for a fortnight and strain for use.

COMPOUND TINCTURE OF BARK.

[This was formerly known as the celebrated HUXHAM'S TINCTURE OF BARK.]

Take of the best lance-leaved bark *well bruised* two ounces, dried Seville orange-peel in small fragments one ounce and a half, snake-root bruised three ounces, cake saffron one drachm, cochineal bruised two scruples, rectified spirit of wine fourteen ounces, pure water six ounces.—Mix in a wide-mouth bottle; closely cork it, and macerate it for fourteen days, shaking it daily. Strain and keep closely corked as before directed.

COMPOUND TINCTURE OF GENTIAN.

Gentian-root sliced and bruised two ounces, dried peel of Seville oranges one ounce, cardamom seeds bruised half an ounce, rectified spirits of wine twelve ounces, pure water half a pint. Treat these ingredients as directed in the above recipes.

TINCTURE OF MYRRH.

Best myrrh (bruised, do not purchase it in powder; for it is then adulterated) two ounces, rectified spirits of wine one pint, pure water half a pint. Treat as above.

TINCTURE OF SENNA.

Senna leaves three ounces, caraway seeds bruised three drachms, best raisins bruised four ounces, rectified spirit one pint, pure water one pint. Treat as the above tinctures.

TINCTURE OF RHUBARB.

Root of the best Turkey rhubarb bruised two ounces, liquorice-root bruised half an ounce, bruised ginger two drachms, cake saffron two drachms, pure water one pint and a quarter, rectified spirit eight ounces. Treat as the other tinctures.

TINCTURE OF CALUMBA.

Bruised calumba-root two ounces and a half, rectified spirits twelve ounces, pure water eighteen ounces.

TINCTURE OF CASCARILLA BARK.

Bruised cascarilla bark four ounces, rectified spirits of wine fourteen ounces, pure water sixteen ounces. Treat as the other tinctures.

REMARKS.

In the above prescriptions, "*rectified spirits*" mean the strongest spirit of wine, or alcohol. It is almost impossible to procure this of the proper and honest strength, unless it be obtained from the rectifying distiller. Some few druggists of the first class, to be sure, sell it genuine, but the smaller ones and medical shops generally sell the "proof spirit," which is very little more than half the strength of rectified spirit; and therefore unfit for the above purposes if water be added.

CHEMISTRY.

WATER

Is a transparent colourless liquid, which has neither smell nor taste. It is a powerful refractor of light, conducts heat very slowly, and is an imperfect conductor of electricity. It is proved by some eminent experimenters, that water is compressible, to a limited extent, by great pressure. The specific gravity of water is one, the density of all liquid and solid bodies being referred to it as a term of comparison. One cubic inch at 62 F., and 30 inches of the barometer, weighs 252,458 grains, so that it is 815 times heavier than the atmospheric air. Water is one of the most powerful chemical agents which we possess. Its agency is owing partly to the extensive range of its own affinity, and partly to the nature of its elements. The latter circumstance has already appeared in the process for obtaining hydrogen gas. It combines directly with many bodies, sometimes it is contained in variable ratio, as in ordinary solutions; in other compounds it is present in a fixed definite proportion, as is exemplified by its union with several of the acids, the alkali, and all salts that contain water of crystallization. These combinations are called hydrates. Thus, concentrated sulphuric acid is a compound

of one equivalent of the real dry acid, and one equivalent of water, and its proper name is hydrous sulphuric acid, or hydrate of sulphuric acid. The adjunct, hydro, has been sometimes used to signify the presence of water in definite proportion; but it is advisable to prevent mistakes, to limit its compounds, (employment) to one of hydrogen. The purest water which can be found as a natural product is procured by melting freshly fallen snow, or, by receiving it in clean vessels, at a distance from houses; but this water is not absolutely pure, for if placed under the exhausted receiver of an air pump, or boiled briskly for a few minutes, bubbles of gas escape from it. The air thus obtained from snow water, is much richer in oxygen gas than atmospheric air; according to the experiments of Gay, Lussac, and Humbolt, it contains 34.8 per cent of oxygen, and the air separated by ebullition, from rain water, contains 32 per cent of that gas. All water which has once fallen on the ground, becomes impregnated with more or less earthy or saline matters, and it can be separated from them only by distillation; the distilled water thus obtained, and preserved in clean well-stopped bottles, is absolutely pure. Recently boiled water has the property of absorbing a portion of all gases when its surface is in contact with them, and the absorption is promoted by brisk agitation.

The following table from Dr. Henry's chemistry, shows the absorbability of different gases, by water deprived of all its air and ebullition. 100 Cubic inches of such water at the mean temperature and pressure absorb of

	Dalton & Henry.	Laussure.
Sulphuretted hydrogen,	100 cubic inches,	253
Carbonic acid,	100	106
Nitrous oxide,	100	76
Oliefiant gas,	12.5	15.3
Oxygen,	3.7	6.5
Carbonic oxide,	1.56	6.2
Nitrogen,	1.56	4.1
Hydrogen,	1.56	4.6

Laussure is in general too high; Dalton and Henry, for nitrous oxide, are considerably beyond the truth, according to Sir H. Davy.

A BLACKSMITH SURGEON.

Mr. Cheselden, who is well known as having been surgeon to the Queen of George the Second, going into an obscure country town, found a blacksmith, who, with the best intention and utmost confidence, was in the habit of performing the operation for extracting the cataract. Pleased with his talents, Mr. C. took pains to instruct him, and at a future time inquiring what had been his success, the man replied, "Ah, Sir, you spoilt my trade, for after you explained to me what I had been doing, I never dared try again."

ACADEMY OF SCIENCE.

Translated expressly for the FAMILY DOCTOR.

Two communications were received to-day concerning the potatoe disease. This new calamity, which presses so cruelly upon the working classes, is most probably the result of the bad season. We have had the temperature constantly varying; the frequent rains, the want of heat in the summer, no spring, and an autumn extending from March to September, sufficiently explain the existence of those paresite plants which humidity creates in the disorganised cellules of useful vegetables. Whatever may be the cryptogamous plants which exists in the diseased potatoe, it is extremely probable that it is a sort of mouldiness that produces the evil complained of in these diseased tubercles. It appertains to science to study the peculiarities of such a phenomenon. We can only remark that M. Payen advises that the potatoes be pounded, previously cutting the potatoe into four parts, to ascertain if the heart is sound.

MEDICAL SCIENCE.

Dr. Bevoine, chief surgeon of the Hotel Dieu at Lyons, presents to the Academy a copy of the second edition of a Practical Treatise upon the Diseases of Children. This work, since its first publication, has assumed a high position. It is principally based upon pathological anatomy and clinical experience. Ancient and modern facts were submitted to the test of observations. He compared ancient facts with new ones, and submitted both to the test of experience. M. Bevoine has reproduced the ancient truths, which were forgotten or unknown, without neglecting that which is due to modern science. It is in consequence of the excellent tendency and capital direction of this work that we recommend it to the public.

Absorption and Elimination of Medicine.—MM. Leneran and Wilson communicated the result of their observations upon the absorption of certain medicinal poisons. In a series of cases where the sick had taken twice the quantity of the ordinary dose, they detected the antimony in the urine. In pursuing the different phases of this elimination, they have established it as a fact that this substance remains much longer in the system than is generally believed, and that it is intermittent in its action. In two cases they have detected the presence of antimony twenty-four days after its administration. The lodging of the antimony is sensibly prolonged after the dose is a second time repeated. It is in the latter case they have detected the presence of the metal after twenty-four days. These gentlemen have remarked that the intermittent elimination of the antimony is more remarked according to the distance of time upon which it was administered. This intermittent fact is exceedingly curious, on account of its connexion with many pathological phenomena, and which apparently have until the present moment escaped the attention of tricologists. The authors of this communication, de-

siring others to repeat their experiments, point out the means by which they have succeeded. They added the pure effervescing hydro-chlorique acid to the urine. They stirred the two liquids with a pewter blade, which remained plunged in the urine. The pewter becomes clouded after a few hours if the urine is plentiful, but it is necessary to let it remain several days if the antimony is limited in quantity. The ordinary temperature will be sufficient, but it will be more sensibly perceived when the days are hot.

PRACTICE OF MEDICINE.—SPITTING OF BLOOD.

CAUSES.

It arises from severe cold, blows on the chest, and very often is a symptom of inflammation of the lungs. It is frequently met with arising from no apparent cause but owing to constitutional debility, or an hereditary tendency to consumption. Violent exercise, such as leaping, running, lifting great weights, rowing, or wrestling, will also cause it, more especially in persons who are spirited but physically weak. In such cases, the will seems to carry people on in competing trials of skill, strength, or speed, far beyond the natural powers of the body. We have encountered it in weakly persons who overtaxed the powers of the body in various ways. In such cases it often becomes periodical, ceases, and then returns again; then it will disappear altogether, and consumption immediately make its appearance. Of course, it ceases altogether in numerous instances, and neither returns nor ends in a consumption; but in those cases, the exciting cause is pretty apparent, and that removed, the effect disappears altogether. There are cases again of people spitting blood, even for years, and recovering perfect health. It must not, therefore, be supposed that consumption is a necessary consequence of spitting blood, although it is a very frequent one.

Symptoms.—The blood appears often suddenly streaking the expectoration, without any previous symptom. In general, however, it is preceded by a saltish taste in the mouth, and a sense of weakness or faintness. The face is pale and anxious, and there is a feeling of coldness in the extremities. There is often a cold, clammy, perspiration, and the hands and finger nails appear bloodless. The pulse is small, quick, and intermittent. The respiration is of course difficult and puffing. The distinctive symptom is the appearance of the blood itself.

Treatment.—The patient should be bled in the arm, and a wide orifice made with the lancet. He should be placed upright, so as to make him faint. It is better to make him sit in a chair than allow him to lie down. The fire should be extinguished, the window thrown open, and the lightest covering thrown over the patient. The coldest spring water should be thrown over the shoulders and chest,

and a wet cloth wrapped round it, and kept constantly soaked. If ice can be procured, and put it on the front of the chest, it will be preferable to water. The patient should not be permitted to move, but allowed to remain as easy and undisturbed as circumstances will permit of. All curious neighbours and inquisitive visiters, should be driven forth. The patient must not speak, or have any chattering person near him. He must manage all with signs or writing.

In regard to medicine, there is only one powerful, good, and effectual remedy, that is the *superacetate* of *lead*. There must be a vigorous application of this medicine. Two or even three grains may be administered three times a day; but it is better to begin with two grains every six hours, and be regulated by the continuation or increase of the bleeding. The only inconvenience attending the use of the lead is constipation and colic: both may be averted by attention to the bowels, either through the administration of four grains of ext. of colocynth or a clyster: castor oil may be applied, and is a good medicine in such a case. We have given half a grain of opium at night, to obviate griping or avert the colic, which lead is very liable to produce, as witness the painters' colic.

We have given three grains of the extract of colocynth, and two of the superacetate of lead twice a-day, and added half a grain of opium to the pill at bed time.

The stomach often rejects the medicine. In such a case one or two drops of hydrocianic acid or prussic acid, twice a-day will remove the sickness, and cause the stomach to retain the medicine. In regard to food,—the patient must be literally starved,—a little gruel, lemonade, barley-water, &c. may be given him to drink, but nothing stronger.

The bleeding, in general, soon yields to such treatment, and indeed it is seldom fatal in the first attack. The cold water, ice, wet cloths, and open windows must not alarm people as to cold, because it has been established, that in such cases no evil result flows from these necessary applications.

In conclusion, the state of the bleeding, of the pulse, and of the bowels, are the cardinal points to be attended to. They must all be carefully watched, and the relaxation or increased activity of treatment resorted to accordingly. Great care must be taken for a considerable period after the dangerous symptoms have disappeared.

RHEUMATISM OF THE SCALP, AND INFLAMMATION OF THE BRAIN.

Since our description of the wounds and injuries of the scalp, one or two persons have applied concerning a supposed rheumatic affection of the integuments covering the skull. It is necessary, above all things, in affections of the head, to discover whether the disease be external or internal. In rheumatism of the scalp, there is

generally a similar affection in the joints or limbs. The tenderness of the head is very great, and that peculiarly distressing pain extends to the face and neck, and particularly behind the ears. The rheumatic fever and characteristic sweating are also present, together with a peculiar feature, viz.—increase of pain towards night. There is also a sense of coldness, and additional coverings to the head do not inconvenience the sufferer, or increase his pain by the warmth. On the other hand, when the brain itself is inflamed, or the membranes, it is attended with giddiness, drowsiness, and throbbing in the head. There are also fretfulness, fever, flushed countenance, watery eyes, pain in the head, and quick small pulse. Another distinctive feature is, that when the inflammation is internal, additional coverings to the head could not be born. Finally, the pain, instead of increasing towards the evening, is more particularly experienced in the morning, a circumstance easily accounted for, from the horizontal position of the body, when in bed, permitting a greater flow of blood to the head. These differences are important, because the treatment in the two cases must be very different in many respects. It may be remarked, that rheumatism of the scalp may exist in combination with inflammation of the brain in membranes.

DR. JENNER.

The following is the Epitaph placed on the tomb of this much-lamented individual.

Within this tomb hath found a resting place
The great Physician of the human race,—
Immortal Jenner! whose gigantic mind
Brought life and health to more than half mankind.
Let rescued infancy his worth proclaim,
And lisp out blessings on his honour'd name;
And radiant beauty drop one grateful tear,
For beauty's truest friend lies buried here.

A PHYSICIAN'S HINT TAKEN.

Sir Richard Jebb used to tell a story of himself, which made even rapacity comical. I had it from the lady to whom he told it. He was attending a nobleman, from whom he had a right to expect a fee of five guineas:—he received only three. Suspecting some trick on the part of the steward, from whom he received it, he, at the next visit, contrived to drop three guineas. They were picked up, and again deposited in his hand; but he still continued to look on the carpet. His lordship asked if all the guineas were found. "There must be two still on the carpet," replied Sir Richard, "for I have but three." The hint was taken as he meant.

DIALOGUE.

PAINTERS.

"WELL, sir, you look rather pale, and your countenance is of an unhealthy and sallow appearance. What trade do you belong to?"

"I am a painter by trade."

"Well, what do you complain of?"

"Well, sir, I find my lungs considerably affected, and almost imagine it is asthma."

"When do you feel it most?"

"In the morning on going to work, and just after I get into the workshop. It cuts me then like a knife to the very bottom of my chest."

"You have, of course, a great quantity of turpentine about the place?"

"We have, sir."

"Have you any ventilation?"

"There are broken windows enough, but the smell of paint is very overpowering. I have known some men faint in the morning. I always smoke to prevent the effects of the paint."

"Not a bad plan either, and decidedly useful in your business. Are your bowels at all affected, or your appetite?"

"The latter is decidedly so, and the bowels are very irregular, sometimes costive, at other times the very opposite; but the colic is the worst affection of all."

"No doubt of it. The colic is produced by the lead contained in paint. It gets upon your clothes and skin, and from the hands it is carried into the system, giving rise to a disease known in medical works as the painter's colic. That complaint depends altogether on the presence of lead in certain paints."

"Then there is no avoiding it?"

"How so? Cannot you wash yourself carefully after work, and remove your working clothes?"

"We could, but we would be called nice, particular, and saucy."

"And rather than be laughed at you would permit disease to lay its hand upon you and undermine your constitution. That is the height of folly, but it is a familiar folly, and we thus get used to it. Have you occasional fits of sickness?"

"Often. Indeed the paint has a most powerful effect upon the constitution."

"I have observed that; and as lead may be absorbed and produce mischief in the constitution, so the fumes of turpentine and paint become also highly prejudicial to health by being taken into the lungs."

"Can you suggest any remedy?"

"Certainly. Ventilation is one, and that common sense might teach the men. Another thing is personal cleanliness. I know that working men feel tired enough on leaving their business at night,

but they should recollect old age and its debilities, and endeavour with care to ward off and lighten the sorrows of future years. Snuffing up spirits through the nostrils is a very useful thing. Smoking too is decidedly beneficial, and the Peruvian bark made into an infusion, a table spoonful taken twice or thrice a-day is also very beneficial in setting the stomach right. Attention should be paid to the bowels, and every effort used to keep the paint from the skin. Ventilation and bathing, with an observance of the above hints, could easily avert these evils, of which all painters have good reason to complain."

"I feel obliged to you, sir, and in spite of ridicule I shall pay more attention to my health than I have done."

SURGERY.

FRACTURES, OR BROKEN BONES.

FRACTURES are discovered by the eye, the ear, and the touch. The symptoms are, pain, swelling, and tension, in the contiguous parts; a more or less crooked or distorted state of the limb; a crackling or grating noise on the parts being handled; and loss of power to a certain extent in the injured limb.

The indications of cure in all fractures are, to replace the parts of the bone that have been removed from their natural situation; and to retain them in this situation as long as may be necessary, and to obviate such symptoms as may supervene during the cure. If there be much swelling and inflammation, these should be removed by fomentations, lotions, or, if necessary, local bleeding and purging, or the whole combined, according to symptoms. To retain the bones when replaced, compresses, bandages, and a relaxed state of the limb till the cure be completed, are necessary.

FRACTURES OF THE NOSE.

Both the bones and cartilages of the nose are liable to be broken. If the bones are broken, the nose appears flat where the fracture is; and if the cartilage is the suffering part, the nose leans to one side. If the injury is considerable, the cure is incomplete; and from proximity of this part to the brain, the danger is considerable. In order to a cure, the patient must be placed in a reclining posture, and the depressed parts of the bone elevated with some proper instrument, replacing them at the same time in their proper order with the fore-finger and thumb of the other hand. To prevent them from collapsing, a canula must be introduced, covered with soft lint, and spread with any bland ointment. If any part of the bone is raised above the rest, a double-headed roller must be applied.

FRACTURES OF THE RIBS.

These are discovered by the seat of the pain, and by pressure of the fingers. In general the symptoms are moderate; but in some

instances the pain is severe from the first; the breathing is difficult, attended with cough, and sometimes spitting of blood; the pulse is quick, full, and sometimes oppressed. These symptoms, however, only occur when the fractured rib is pushed inwards upon the pleura, or investing membrane of the lungs, and the lungs themselves.

In every case of fractured ribs, the patient must be blooded in proportion to his age and constitution. If any inequality on the rib is discovered, let the patient make a deep inspiration, and by equal and moderate pressure, endeavour to replace it; and to prevent its rising, apply a broad flannel roller, or a leather belt, quilted inside with cotton or flannel, moderately light, and let it be worn for several weeks. When the accident occurs on both sides, that is when the ribs are broken on each side, a bandage ought not to be applied unless with extreme caution, as suffocation has been known to happen before the bandage could be removed, from the action of the diaphragm having been lost. Adhesive plaster to confine the action of the ribs is more in this instance to be depended upon.

FRACTURE OF THE COLLAR-BONE.

Whatever part of the clavicle or collar-bone happens to be broken, the part which joins the shoulder-bone descends mostly below that part which is fixed to the breast-bone, on account of the weight of the arm. When this bone is fractured, the patient cannot lift up his arm; it hangs inclined towards his breast, and in a slight motion of the shoulder, the fracture in the clavicle will be evident to the touch, sight, or ear, or them all.

To reduce a fracture of the collar-bone, it is only necessary to to raise the arm, and support it at a proper height; which is done by a sling round the neck, adapted to the length of the arm, and applied equally to every part of it. It is generally directed in these fractures, to keep the patient's head raised, and his shoulders drawn back. But this should by no means be generally adopted, as, in some cases, the fractured parts of the bones are kept more exactly together, when the head is bent down upon the breast, and in others while it is raised with the shoulders.

If the fracture is accompanied with a wound and there are splinters, they must be removed, but with caution, on account of the vicinity of the subclavian artery. The bones are generally united in about a fortnight; but the corresponding arm should not be used till the end of the third or fourth week.

FRACTURE OF THE LOWER JAW-BONES.

The fractures are easily discovered by the touch. To replace them, the patient's head must be held firmly back, and the finger and thumb of one hand put into the patient's mouth, and the fingers of the other hand on the outside. In this manner the parts are brought close together. In case of a fracture on both sides, replace the one after the other in the same manner. Then lay

a thick linen compress over the chin, extending from ear to ear over the jaw, and then with a piece of pasteboard previously moistened in water, adapt it to the jaws, and over the whole apply a moderately light forehead bandage. The patient must be kept perfectly quiet. He must feed entirely on spoonmeat, and avoid using his jaws in any way. Where only one bone is broken, the patient may be allowed to eat soft meats, and speak with freedom in about three weeks. If both bones are broken, this should not be permitted till about the end of five weeks. If a tooth is situated in the course of the fracture, extract it. If any teeth are displaced not in the course of the fracture, return them to their sockets, and tie them to the contiguous teeth. The bandage should not be removed except when absolutely necessary, except there should be a wound requiring to be dressed.

TO CORRESPONDENTS.

Grateful Heart, Norwich.—We are rejoiced she received so much benefit from our advice. We feel obliged for her pushing the work. Add half a grain of opium to the pill, say twice a week for a fortnight, and drink a little warm tea before getting out of bed in the morning.

A Desponding Father, Manchester.—Cut the boy's hair close. Wash night and morning with common soft soap. Take ten grains of lunar caustic, half an ounce of laudanum, and four ounces of rose water; shake until the caustic is dissolved. Then, with a camel-hair pencil, wash the sores twice a-day. Look attentively to the bowels.

Wm. Foster.—Was recommended to try the advice given to "Constant Reader, Rotherhithe." Use likewise the infusion of Peruvian bark, a table-spoonful thrice a-day.

Old Man, Birmingham.—We cannot make out his letter at all, although we have tried hard enough to decypher it; we thought there were few who wrote such a crooked hand as ourselves, but he beats us hollow.

Licentia, Leamington.—Wishes to know what is the best medicine to take with him to the West Indies. He ought to procure a small medicine chest; a little calomel, blue pill, rhubarb, magnesia, salts, senna, and compounded pills, should form some of the items. He should have a proportion of every common household medicine, above all extract of colocynth, in a covered jar.

How, Coventry.—Read our article on itch. He wants some opening medicine. Seven stamps can secure him a box of gentle, yet effectual, pills, in such a case as his.

A. T., Manchester.—If his weakness of sight is constitutional, nothing, save proper glasses will benefit him: but weakness of sight often springs from indigestion. Try the common blue spectacles which have no magnifying power, put them on the moment you awake and before opening the shutters. We are glad our advice has benefited those whom he knows, and should feel happy in being of service to him.

Z. S., Manchester.—Let the young woman take half a grain of opium and three grains of blue pill, twice a-week during a fortnight. Procure some gentian roots and make an infusion. Let her take a table-spoonful at noon, in a glass of white wine. Write again. The seton should be kept open. A dozen leeches would be of service, placed over the spot where the pain is felt.

Helen.—Apply a blister to the knee; after the blister is removed, procure some weak iodine ointment, and spread a thin layer of it on a linen rag—apply it to the knee, and roll flannel round the joint. Should much pain result, make the iodine weaker with hog's lard. After a week or a fortnight, pump cold water over the the joint night and morning.

J. Wright, Leith Walk.—Go on as usual. Glad he improves. Rub the legs night and morning before the fire with a piece of flannel, particularly the feet, and use a little hartshorn and oil to assist the friction.

X. Y. Z.—May do as he intends. The practice is good.

T. H., Stoke.—A warm bath, and new flannel would be decidedly the best thing he could do. Afterwards, take a little opening medicine.

R. C. C., Manchester.—See our article, Itch. The disease is not confined to any particular part of the body. From what he states, we think it ought to be treated for itch, but that disease must be seen to be known.

W. S., Sidehouse Lane.—We can send some medicine for his complaint. Seven stamps will be sufficient.

J. Petrie.—The volume, title page, index, &c., will be completed at the end of twelve months, or one volume each year.

Underwood, Salford.—Try the tar-water, as recommended in our article on asthma.

T. H. W. Park.—Must correspond by letter privately.

Philo Curly Hair.—Wet the hair first and curl it. When dry it will keep its form.

J. J. B., Lambeth.—If he is troubled with tape-worm, take an ounce of turpentine at once: afterwards we can prescribe for his other complaints.

Working Chemist will be attended to.

X. Z. Dale.—Seven stamps will enable him to get rid of his complaints.

George Wright.—Try the infusion of sarsaparilla, a wine-glassful thrice a day. Keep the bowels regular with four grains of extract colocynth; mix tincture of cardamoms, one drachm; ipecacuanha wine, fifteen drops; flower of sulphur a pinch; elder flower wine, one glassful: take the above at bedtime, twice a week.

John Jones, Macclesfield.—Try the above mixture recommended for George Wright. Harrowgate water is the proper thing for him to drink. Cannot he paint his way there?

Y. Y. W., Staffordshire.—Twenty grains of carbonate of iron, twice a-day; beginning at first with once a-day.

G. D. L.—Let the hair grow long behind. We know no oil particularly useful in making the hair grow. He should begin the habit of sponging the body all over every morning. Try lukewarm water first; wear flannel. Porter will do no harm, or figs either, although neither will do much good.

We are compelled to leave several letters unanswered this week.

NOTICE TO PRIVATE CORRESPONDENTS.

Mr. Palmer neglected to state to whom the order was payable.

Gateshead, Fell, neglected to give any address, consequently, we could not answer his letter as we should have done immediately on the receipt of his communication.

N.B. Medical Advice will always be given to any person (gratuitously) through the pages of the FAMILY DOCTOR; but it is necessary to give age, sex, employment, symptoms of disease, length of its duration, together with the most probable cause, or at least to describe the commencement of the attack. Any one may have advice through the above medium—viz., *answers to correspondents*, without the necessity of giving their names, or the possibility of their being made known; only, there may be questions which we shall decline answering in our pages, in which cases the patient may correspond with the editor, receiving advice until cured, on payment of 2s. 6d., as a fee, in the outset. In all cases direct to the Editor of the FAMILY DOCTOR, 4, York Cottages, St. Mark's-road, Camberwell New-road, London.

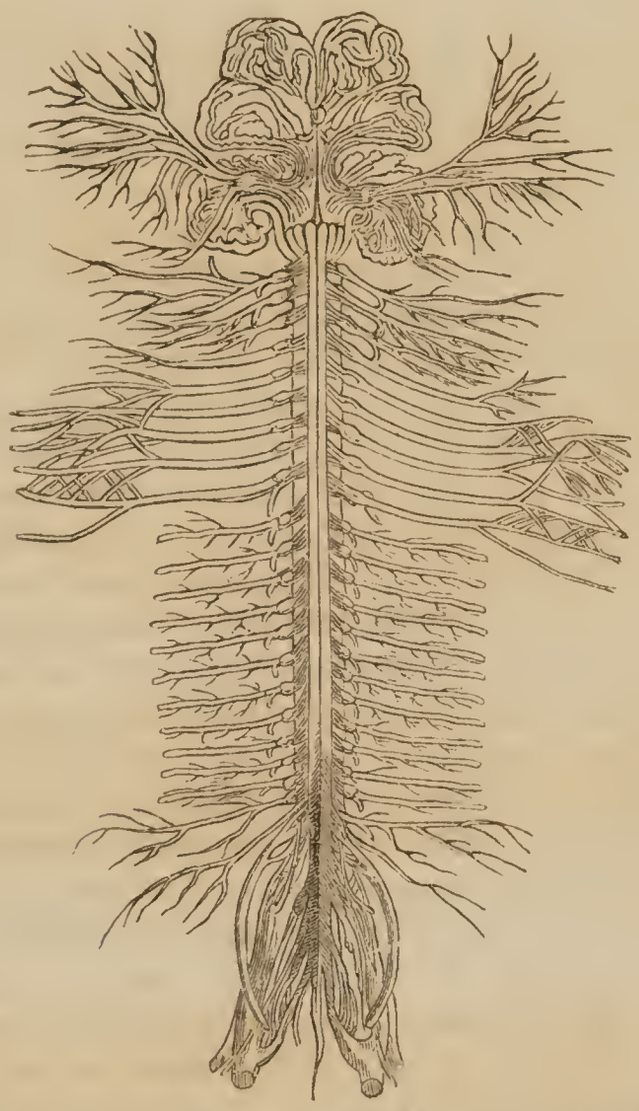
Parts 2 and 3 of the FAMILY DOCTOR, *Price 6d. each, are now ready, and may be ordered from any Bookseller.*

THE

FAMILY DOCTOR.

ILLUSTRATED.

No. 18.] OCTOBER 4, 1845. [PRICE 1½*d.*



ANATOMY AND PHILOSOPHY.

WE thought it best to allow the celebrated philosopher, Magendie, to speak for himself; and therefore, to assist the reader in understanding him, we present a front view of the brain and nervous system. Our previous illustrations will make the reader familiar with the brain proper and the small brain, also with the spinal marrow. He will now see the connexion of the whole, but he must remember that the spinal column is surrounded by a sheath like the brain, and protected by the bones of the spine, which every one knows

form an arch to admit it. Hence the canal for the fluid Magendie alludes to. The lower part of the spinal column is remarkable from its plexus of nerves, where we are informed the greatest amount of fluid is found. Having showed the brain, spinal marrow, and nerves branching off, we leave the rest to Magendie.

By M. Magendie.

That I may be better understood, it is necessary to say a few words on the formation of the brain. This is divided into two portions: one large, and occupying the upper portion of the cranium, viz. the *brain proper;* the other small, and placed beneath, viz. the *cerebellum.* The exterior of the brain presents a great number of rounded protuberances, varying in different individuals, and separated by furrows. This disposition has led some to believe that the brain is only a large membrane, folded upon itself. Numerous cavities are found in the valve of the *cerebrum.* It is there most probably that some of the mysteries of nervous actions and intellect are accomplished. Can it be believed that these cavities, rendered so important by the phenomena there produced, have been, and still are, denominated *ventricles,* little bellies? Is it not high time to discard this frivolous appellation from the language of anatomy? How-

ever this may be, the nomenclature of the parts contained within the cavities of the brain offer this remarkable circumstance, that many of them have names indicative of hydraulic uses: thus we have the names *aqueduct*, funnel, valve, and even *bridge*. Most of these names have descended to us from distant periods, and we have been accustomed to look upon them as the remains of some ancient system, which has crumbled beneath the accumulation of time and science. The old physicians believed that the ventricles of the brain were filled with water, which in certain cases escaped by the nose; a belief which passed to the vulgar, among whom we still meet with it. These ideas are looked upon as erroneous by modern anatomists; according to whom the ventricles of the brain, in its healthy state, do not contain any water, but a light and invisible vapour, which they have hesitated not to represent as the immaterial essence presiding over the acts of intelligence. Nevertheless, when we open the brain, we almost always find the ventricles filled with a limpid fluid; but the present doctrines regard this as the product of the disease producing death. Having acquired the data with regard to the liquid which surrounds the brain and spinal marrow, I have been led to think the water which is so frequently found in the cerebral cavities might be the same which is found on the surface of the brain; from which it would follow that its presence in the ventricles was natural, according to the opinion of the ancients, and not a morbid product, as is at present supposed. It will be perceived that in order to confirm this idea, it was necessary there should exist an opening by which a communication might be established between the exterior of the organ and its internal cavities; and yet no such opening was known. I did not, however, despair, and after some researches made at the termination of certain diseases, I at last found an aperture, two or three lines in diameter, completely hidden by a lobe of the *cerebellum*, and forming a *true entrance to the cavities of the brain*. I represented this opening in a fine wax cast, which I presented to the academy. This fact once established, it became mechanically necessary that the *cerebro-spinal* fluid should enter into the cavities of the brain, and fill them, for they communicate with each other. I had no difficulty in demonstrating this in the bodies of persons destroyed by accidents, and which in fact showed me the liquid filling the cerebral cavities, &c. This discovery gave me the key to the hydraulic nomenclature, of which I have spoken. I perceived that these splendid ruins of ancient doctrines were simply the figurative but just description of an assemblage of organs in full activity, and fulfilling their singular functions in the brain of those very persons who denied their existence. In fact the valvula vieusseni of the cerebellum (or little brain) fulfils to a certain extent the office of a valve. The *aqueduct* has really the functions which this name implies, as it transports the fluid from the fourth to the third ventricle; the infundibulum (or funnel) carries it to the pituitary gland; and lastly, the pons (or bridge) is really an arcade, placed trans-

versely in the direction which the fluid observes; it is situated, not over, but beneath, the current which it traverses, and, to give an idea of it, I cannot do better than call to mind the gigantic enterprise which is now in progress under the Thames. Thus, then, is a complete restoration of the hydraulic apparatus presented by the brain. Without being an exclusive admirer of ancient times, in this instance, I might remark, that our predecessors had observed more accurately than we have done.

Modern anatomists, however, have this merit, that they respected the names, although they regarded them as false and illegitimate; and in this way were wise, as people sometimes are, without knowing it. The fluid which fills this cavity is not in repose; on the contrary, it undergoes constant agitation, by the effect of a kind of flux and reflux, resulting from respiration. Thus, at the moment we inhale, the fluid flows out in part from the cerebral cavities, and passes into the spinal canal; while on the other hand, at the moment of expiration, the liquid re-enters those cavities, and passes by the conduits above-mentioned, particularly the *aqueduct*, which gives passage to fluid now in one direction, and now in the opposite. The mechanical cause of this flux and reflux is very simple; it depends upon the alternating turgescence of the nerves of the spine, under the influence of respiration. This movement of the liquid is arrested, or much retarded by compressing the abdomen. We may remark that this is one of the effects of girdles and nerves, to explain how their use becomes dangerous, or even insupportable, when the pressure is too great. In studying the passage of the fluid by the *aqueduct*, I believe I have discovered the probable use of the *pineal gland*. I look upon it as a *plug* destined to open and shut the aqueduct, over the anterior opening of which it is placed. Two large veins are placed and fixed upon the gland; these vary in size, sometimes they swell greatly, and at other times are nearly empty. It is evident from the relative position of the parts, that the moment the veins swell, they must press down the pineal gland, and this cannot yield nor descend without shutting the entrance of the aqueduct to a greater or less degree.

Now, as one of the constant effects of crying, of anger, of exertion, and of all violent passions, is to swell the veins of the head, and particularly those which press on the pineal gland, it follows that in those different conditions, the entrance of the fluid into the ventricles is intercepted, or at all events impeded. The use then, or more correctly, one of the uses of the pineal gland, would appear to be that of regulating the flow of the *cerebro-spinal* fluid through the aqueduct. Such an investigation was extremely difficult; and if there were some hopes of ascertaining some truths of great interest, the chances of errors were much more numerous. In order to avoid wandering as much as possible, I took two extreme points, reserving the intermediate gradations for future opportunities. I first ascertained the quantity of *cerebro-spinal* fluid in persons endowed with

reason; secondly, in idiots; and thirdly, in the insane. In idiots—I speak of those who had accidentally become such (not of those who were born such, for in these there exists some vice in the organization of their nervous system)—there exists a considerable quantity of this fluid: it occupies the surface of the brain, and there forms a thick layer; it distends the cerebral cavities, and displaces all the parts which are to be found there, particularly the pineal gland, which no longer has its natural situation, and therefore no longer fulfils the office I attribute to it. The aqueduct in consequence presents a considerable enlargement. It is in such cases that we find from six to seven ounces of *cerebro-spinal* fluid, and the same occurs in the imbecility of old persons. The insane have also a large quantity of this liquid, but it does not accumulate at the surface of the brain. Whatever be the nature of this enlargement, monomania, melancholy, hallucination, &c., the ventricles are always very much distended and enlarged by the fluid, of which sometimes three ounces are found in these cavities alone. Persons who retain their reason till the time of their death generally have less than an ounce of serosity in the ventricles. Thus it may be easy to distinguish the brain of a madman and of an idiot, from one that is sound. I once had to examine the brain of a man of genius, who died at an advanced age, but still retaining his faculties entire; the entire quantity of the *cerebro-spinal* liquid did not amount to two ounces, and the cavities of the brain scarcely contained a drachm. It appears then to be established by these general results, that the development of the faculties of the mind is in the inverse ratio of the quantity of the *cerebro-spinal* fluid; and this is to a certain extent easily understood, since the volume of fluid cannot increase but at the expense of the cerebral mass; and, in general, superior intellects are found connected with voluminous and well-developed brains. But those who have a large head and high forehead, and are disposed to be somewhat vain upon the subject, ought to feel some anxiety about the relative proportion of their *cerebro-spinal* fluid. I may add, that not only ought it not to be too abundant, but its movements ought to be free in its channels.

Such are the results of my inquiries, but much is still wanting to complete the history of the *cerebro-spinal* liquid. I have collected many facts, and believe that I have arrived at manyinteresting conclusions, but they require to be matured.

INFUSIONS.

Infusion of Cloves.—Of fresh cloves well bruised one drachm boiling water half a pint; treat as the other infusions.

Infusion of Cascarilla Bark.—Cascarilla bark well bruised half an ounce, boiling water half a pint; treat as the other infusions.

Compound Infusion of Orange Peel.—Dried peel of the Seville orange two drachms, fresh lemon-peel one drachm, bruised cloves half a drachm, boiling water half a pint; treat as the others.

STATISTICS OF MORTALITY.

NORTH RIDING OF YORKSHIRE, PART OF WEST PART OF DURHAM.

AREA 2,104,737.

Popul.	Agricul.	Manufac.	Others.	Total.
319,042	25,082	21,730	19,463	66,275

DEATHS

Under 5 yrs.		13 to 21		50 to 60		70 to 80		above 90 to 102		
M.	F.	M.	F.	M.	F.	M.	F.		M.	F.
732	594	16	19	22	15	34	46	,,	38	62
186	200	22	23	16	19	35	30	,,		38
122	139	23	23	26	21	30	47	,,		—
80	74	31	26	23	23	38	39	,,		100
63	41	24	40	23	21	41	44	Unknown		20
38	48	26	24	15	17	43	45			
		25	39	19	17	36	37	Total		6,953
1,221	1,096	33	29	19	19	47	48			
1,096		39	35	20	30	45	39			
				17	18	37	30			
2,317		239	258	26	27	41	52			
		258								
		497		226	237	434	457			
				237			434			
				463			891			

CAUSES OF DEATH.

Epidemic	509	Typhus	165
Nervous	601	Convulsions	338
Respiratory	833	Consumption	621
Digestive	223		

VARIOUS.

Locomotion	34	Child Bed	63
Circulation	34	Violent Death	101
Old Age	459		
Total			3,462

NITROGEN GAS.

ITS existence, as distinct from every other gaseous substance, appears to have been first noticed in the year 1772, by the late Dr. Rutherford, of Edinburgh; and discovered by Lavoiser to be a constituent part of the atmosphere. Scheele also made the same observation:—Soon after, Lavoiser called it *azote*, from a primitive greek word,

because it is unable to support the respiration of animals; but as it possesses this negative property in common with other gases, the more appropriate term nitrogen has since been applied to it, from its being an essential ingredient of nitric acid. Nitrogen is most conveniently prepared by burning a piece of phosphorous in a jar of an inverted one over water. The strong affinity of phosphorous for oxygen enables it to burn till the whole of that gas is consumed. The product of the combustion pyrophosphoric acid is at first diffused through the residue in the form of a white cloud; but as this substance is rapidly absorbed by water it disappears entirely in the course of half an hour. The residual gas is nitrogen, containing a small quantity of carbonic acid and vapour of sulphur, both of which may be renewed by agitating it briskly by a solution of pure potash. Several other substances may be used for withdrawing oxygen from atmospheric air : a solution of proto-sulphate of iron charged with binoxide of nitrogen absorbs the oxygen in the space of a few minutes. A stick of phosphorous produces the same effect in twenty-four hours, if exposed to a temperature of 60 F.; also a solution of sulphurate of potash or lime acts in a similar manner, and a mixture of equal parts of iron-filings and sulphur made into a paste with water may be employed with the same effect. Both these processes are, however, inconvenient from their slowness. Nitrogen gas may be more easily obtained by exposing a mixture of fresh muscle and nitric acid of specific gravity 1.20 to a moderate temperature, effervescence ensues and a large quantity of gaseous matter evolved, which is found to be nitrogen mixed with camphoric acid. The latter must be removed by agitating with lime water.

Pure nitrogen is a colourless gas, wholly devoid of smell and taste. It does not change the blue colour of vegetables, and is distinguished from other gases more by negative characters than by any striking quality. It does not support combustion, but, on the contrary, extinguishes all burning bodies immersed in it. No animal can live in it; but yet it excites no injurious action, either on the lungs or on the system at large: the want of oxygen being the sole cause of death. It is not inflammable either like hydrogen; though under favourable circumstances it may be made to unite with oxygen. Water, when deprived of air by ebullition, takes up one and a half per cent of it. Its specific gravity is 0.9722; therefore 100 cubic inches, at the mean temperature and pressure, will weigh 31.15 grs. Considerable doubt exists as to the nature of nitrogen; though ranked among the simple non-metallic bodies, some circumstances have led to the suspicion that it is a compound, an opinion warmly advocated by Sir Humphrey Davy and Berzilius. The principal argument in favour of this view was the phenomena which attend the formation of the ammoniacal amalgum, prepared by the action of galvanism on a salt of ammonia in contact with a globule of mercury. It follows that the metal, if present at all, must have been supplied by the ammonia. Now, ammonia is composed of hy-

drogen and nitrogen. As the former from its levity cannot be supposed to contain a metal, it was thence inferred that it must be present in the latter; but, unfortunately, the supposed metal cannot be obtained. The amalgum no sooner ceases to be under galvanic influence than its elements begin to separate spontaneously, and in a few minutes decomposition ensues, leaving only ammonia, hydrogen, and pure mercury. Sir Humphrey Davy says, water is decomposed in the process: that its oxygen reproduces nitrogen by uniting with the supposed metal, and, that one part of its hydrogen forms ammonia by uniting with the nitrogen, while the remainder escapes in form of gas. The examination of the ammoniacal amalgam affords no proof of the compound nature of nitrogen. Sir Humphrey Davy made an attempt to decompose that gas by aid of potassium intensely heated by a galvanic current, but failed.

There are five compounds of nitrogen and oxygen, the composition of which is as follows:—

	By volume.		By weight.	
	Nitrogen.	Oxygen.	Nitrogen.	Oxygen.
1st. Nitrous oxide	100	100	14	8
2nd. Nitric oxide	100	100	14	16
3rd. Hyponitrous acid	100	150	14	24
4th. Nitrous acid	100	200	14	32
5th. Nitric acid	100	250	16	40

The first of these, as containing the smallest quantity of oxygen, s regarded as a compound of one equivalent, or according to the atomic theory of one atom of each element. The atomic weight of nitrogen oxygen being 8 will therefore be 14. The other four compounds must consequently be composed of one atom of nitrogen, united in the 2nd with two atoms of oxygen, in the 3rd with three, in the 4th with four, and in the 5th with five atoms.

ON THE EFFECT OF ACIDS ON THE TEETH.

Dr. Mason Good observes on this subject, that if the tartar collected on the teeth yield not to common tooth-powder, we may without mischief add a small quantity of the milder acids, in order to render it more efficacious. All dentists oppose the use of acids of every kind; but this is from an unacquaintance with the gradation of chemical affinities. There are but four known acids for which the lime of the teeth has a stronger attraction than for the phosphoric with which it is combined; and these four are the oxalic, the sulphuric, tartaric, and muriatic. From these, ever, we ought sedulously to abstain; but most of the rest may be used with advantage, and harmlessly, and will be often found, by friction of the tooth-brush, to dissolve the tartar of the teeth, without making the least impression on their substance.

DR. BEAUMONT'S TABLE,

SHOWING THE MEAN TIME OF DIGESTION OF THE DIFFERENT ARTICLES OF DIET.

Articles of Diet.	Mode of Preparation	Time required for Digestion. H.	M.
Rice	Boiled	1	
Sago	Ditto	1	45
Tapioca	Ditto	2	
Barley	Ditto	2	
Milk	Ditto	2	
Ditto	Raw	2	15
Gelatine	Boiled	2	30
Pig's feet, soused	Ditto	1	
Tripe, soused	Ditto	1	
Brains	Ditto	1	45
Venison steak	Broiled	1	35
Spinal marrow	Boiled	2	40
Turkey, domestic	Roasted	2	30
Do. do.	Boiled	2	25
Turkey, wild	Roasted	2	18
Goose	Ditto	2	30
Pig, sucking	Ditto	2	30
Liver, beef's, fresh	Broiled	2	
Lamb, fresh	Ditto	2	30
Chicken, full grown	Fricassee	2	45
Eggs, fresh	Hard boiled	3	30
Do. do.	Soft, ditto	3	
Do. do.	Fried	3	30
Do. do.	Roasted	2	15
Do. do.	Raw	2	
Do., whipped	Ditto	1	30
Custard	Baked	2	45
Codfish, cured, dry	Boiled	2	
Trout, Salmon, fresh	Ditto	1	30
Do. do.	Fried	1	30
Bass, striped, fresh	Broiled	3	
Flounder do.	Fried	3	30
Catfish do.	Ditto	3	30
Salmon, salted	Boiled	4	
Oysters, fresh	Raw	2	55
Do. do.	Roasted	3	15
Do. do.	Stewed	3	30
Beef, fresh, lean, rare	Roasted	3	
Do. do. dry	Ditto	3	30
Do. steak	Broiled	3	
Do. with salt only	Boiled	2	45

DR. BEAUMONT'S TABLE *Continued.*

Articles of Diet.	Mode of Preparation.	Time required for Digestion. H.	M
Do. with mustard, &c.	Ditto	3	30
Do. fresh, lean	Fried	4	
Do. old, hard, salted	Boiled	4	15
Pork-steak	Broiled	3	15
Pork, fat and lean	Roasted	5	15
Do. recently salted	Boiled	4	30
Do. do.	Fried	4	15
Do. do.	Broiled	3	15
Do. do.	Raw	3	
Do. do.	Stewed	3	
Mutton, fresh	Roasted	3	15
Do. do.	Broiled	3	
Do. do.	Boiled	3	
Veal, fresh	Broiled	4	
Do. do.	Fried	4	30
Fowls, domestic	Boiled	4	
Do. do.	Roasted	4	
Ducks, do.	Ditto	4	
Do. wild	Ditto	4	30
Suet, beef, fresh	Boiled	5	3
Suet, mutton	Ditto	4	30
Butter	Melted	3	30
Cheese, old, strong	Raw	3	30
Soup, beef, vegetables, and bread	Boiled	4	
Do. marrow bones	Diito	4	15
Do. beans	Ditto	3	
Do. barley	Ditto	1	30
Do. mutton	Ditto	3	30
Green corn and beans	Ditto	3	45
Chicken soup	Ditto	3	
Oyster soup	Ditto	3	30
Hash, meat and vegetable	Warmed	2	30
Sausage, fresh	Broiled	3	20
Heart, animal	Fried	4	
Tendon	Boiled	5	30
Cartilage	Ditto	4	15
Aponeurosis	Ditto	3	
Beans, pod	Ditto	2	30
Bread, wheaten, fresh	Baked	3	30
Do. corn	Ditto	3	15
Cake do.	Ditto	3	
Do, sponge	Ditto	2	30
Dumpling, apple	Boiled	3	
Apples, sour and hard	Raw	2	50

DR. BEAUMONT'S TABLE *Continued.*

Articles of Diet.	Mode of Preparation.	Time required for Digestion. H.	M.
Do. do. mellow . .	Ditto	2	
Do. sweet do. . .	Ditto	1	30
Parsnips	Boiled	2	30
Carrot, orange . . .	Ditto	3	15
Beet	Ditto	3	45
Turnips, flat . . .	Ditto	3	30
Potatoes, Irish . . .	Ditto	3	30
Do. do, , . . .	Roasted	2	30
Do. do. . . .	Baked	2	30
Cabbage, head . . .	Raw	2	30
Do. with vinegar . .	Ditto	2	
Do. do. . . .	Boiled	4	30

ACADEMY OF SCIENCE.

PARIS.

Translated expressly for the FAMILY DOCTOR.

Medical Science.—The *Monster of La Chatre*, M. Velpeau, announced to the Academy, that according to the expressed wish and demand of the Commission, of which he formed one, the Monster, whose existence had been reported about six weeks ago, was brought to Paris. But there was a difficulty in the way of the Commission, and he felt bound to report it to the Academy. The parents of the monstrous child were, it seems, reduced to great poverty, and found it impossible to prolong their stay in Paris otherwise than by speculating upon the public curiosity. They had requested the permission of the Prefect of Police, but he refused to sanction the exhibition. In this state of things, must the child and its family be permitted to leave Paris? Was this favourable occasion for the study of so rare a phenomenon to be lost? Could the Academy do nothing to prevent the departure and also pursue the investigation? Such were the questions submitted to the Academy, and which they would know how to resolve for the benefit of science. M. Velpeau took the opportunity of giving some description of the child, the result of a rapid examination which he had made previous to the meeting. He remarked, that the two beings which comprise this monster he or she (for the sex is still doubtful) who suckles is the least and less lively, whilst the other, fed from the spoon, is stouter, anp possesses more vivacity. The latter seems also much more cognizant and life-like. It seems also to engross to itself all sensibility. M. Velpeau also remarked that that on tickling or pinching the lower extremities, which are common (as shown in our plate) to both

children, the last-mentioned one alone expressed any pain. At the request of M. Velpeau, the Commission immediately proceeded to the Library, where they found the monster had arrived. After the next meeting, we shall report the proceedings.

Tapping the Chest.—M. Raymond Faure, Chief Physician to the Military Hospital, read before the Academy, in 1842, a memoir, whose object was to prove the innocuous result of tapping the chest to remove pleuritic effusions. He recorded the cases of three patients upon whom he had operated. In an additional note, the author announced to-day the case of three others on whom he had performed the operation. M. Faure mentions, as a remarkable fact, that the patient from whom he drew the greatest quantity of fluid from the chest (viz. three quarts and a fourth) was cured in the most radical manner.

Medical Use of Galvanism.—Dr. Crusell, of Cajoua (Finland) forwarded an extract from the printed bulletin of the Imperial Academy of Sciences, St. Petersburgh, in which he recounts the treatment of certain external diseases by the aid of galvanism, and particularly in cases of cancers.

PHARMACY.

POWDERS.

Purging Powders.—Rhubarb twenty-five grains, cream of tartar one drachm; or jalap one scruple, cream of tartar one drachm.

Powders to promote Perspiration.—Antimonial powder eight grains, cream of tartar six grains; or, antimonial powder seven grains, nitre five grains; or, compound powder of ipecacuanha from five to thirty grains, in fever, &c.

Savine Powder.—Powder of savine leaves, verdigrease, and red precipitate, of each half an ounce; applied to stimulate and consume fleshy tumours, warts, &c.

Worm Powders.—Common salt two drachms, cochineal two scruples; half a drachm every morning.

Tonic Powder in Agues.—Peruvian bark half an ounce, Epsom salts six drachms; one to be given every other hour: or, ammoniated iron five grains, rhubarb three grains, once a day: or, tartarized iron ten grains, cucumber root fifteen grains, for a dose: to be taken four times a day.

MIXTURES.

Mixture of Ammoniacum.—Ammoniacum two drachms, water half a pint: expectorant in coughs, &c.

Antispasmodic Mixture.—Asafœtida two drachms, water half a pint.

Camphor Mixture.—Camphor half a drachm, rectified spirit ten drops (to dissolve the camphor), water one pint; or, shake a piece of camphor for a few minutes in a pint of hot water, in a bottle; cork and let it stand for an hour.

Tartar Emetic Mixture.—Antimony wine half an ounce, nitre two scruples, mint-water six ounces; simple syrup half a drachm. To promote perspiration; dose, from one table-spoonful to four, night and morning.

Purgative Mixture.—Epsom and Glauber's salts, of each three drachms, mint water five ounces and a half, antimony wine one drachm; dose, two table-spooofuls twice a day; or, castor oil half an ounce, beat up with a sufficient quantity of the yolk of an egg, syrup of poppies two drachms, tincture of opium five drops, water one ounce; in Devonshire, or painter's colic.

Restorative Mixture.—Carbonate of ammonia half a drachm, mint water seven ounces, syrup of orange peel half an ounce: a small spoonful when the patient is faint.

Windy Colic Mixture.—Camphor mixture one ounce, spirit of sulphuric ether two drachms, compound tincture of cardamoms half an ounce, spirit of aniseed six drachms, oil of canary, twelve drops, syrup of ginger two drachms, mint water six ounces: dose, two tablespoonfuls occasionally.

Antacid Mixture.—Liquor of potass two drachms, lime water six ounces; dose, one or two spoonfuls occasionally in beef tea, in heartburn, hiccups, &c.

EMETICS.

Ipecacuanha wine one drachm, tartar emetic one grain, water one ounce and a half.

2. Ipecacuanha in powder half a drachm, tartar emetic one grain, tincture of squills one drachm, water eight ounces and a half: dose, three tablespoonfuls at first, and two or more every fifteen minutes, until it operates.

3. Tartar emetic two grains, water four ounces: dose, two table-spoonfuls every quarter of an hour, until it has operated sufficiently.

4. Blue vitriol two grains, water two ounces, for a dose.

Emetic Pills.—White vitriol a scruple, conserve of hips, enough to make a bolus: to be taken for one dose, drinking camomile tea.

OINTMENTS, CERATES, ETC.

Cooling Ointment.—Hog's lard two pounds, white lead one pound: to excoriations.

Cleansing Ointment.—Linseed oil half a pint, elecampane two ounces, verdigrease two drachms: to foul sores.

Spermaceti Ointment.—Olive oil and white wax, of each, four ounces, spermaceti half an ounce.

Itch Ointment.—White Hellebore Ointment.—Root of white hellebore three ounces, hog's lard one pound: used in itch, for the upper ranks of society, who object to sulphur.

2. Hog's lard one pound, sulphur four ounces, essence of lemon ten drops.

Red Lip Salve.—White wax two ounces, olive oil two ounces and a half, spermaceti two drachms, oil of lavender sixteen drops, alkanet, or vermilion, to colour it.

PRACTICE OF MEDICINE.

INFLAMMATION OF THE EYES.

The diseases of the eyes are varied and numerous, and will be treated under the proper head; but as simple inflammation often occurs in families, and is extremely troublesome, we think a few observations upon it may be useful and acceptable to our readers. The simple inflammation is sudden in its *attack*, and does not arise from any known and appreciable cause. It is mild too in character, and does not make such alarming strides as is the case in more serious attacks of inflammation of the eyes, arising from erysipelas, syphilis, &c. The *symptoms* are a feeling of sand between the lids and eyeballs. There is a profuse discharge of tears, easily increased by exposure to light. There is great heat felt in the eye, and considerable redness.

Treatment.—It is good practice to apply half a dozen leeches to each temple, varying the number, however, making them more or less according to age. The severity of the attack must also regulate the application. In severe cases the sooner the leeches are applied the better it will be for the patient, and even a small blister may be advantageously administered to the back of each of the ears. A brisk dose of calomel and jalap should likewise be given, and be assisted by senna tea. There is one excellent prescription used to hasten the action of the bowels, viz. Epsom salts, one ounce; antimonial wine, two drachms; cinnamon water, one pint. Mix. Dose.—A table spoonful every three hours. The forehead and eyes should be kept constantly wet with cloths dipped in water, or in a mixture of equal parts of gin, vinegar, and water. In 20 or 30 hours these measures ought to reduce the inflammation, when a shade may be be used; but a lotion of the following composition should be frequently used to bathe the eyes:—Sulphate of zinc, one scruple; tincture of opium, one grain; rose water, four ounces; and use as a lotion. Much care must be observed after the cure is effected, light avoided, and a shade worn.

TO CORRESPONDENTS.

Parker, Shelton, Potteries.—His age accounts for his affliction. Try the following:—R. Bals. Copaib. half-ounce; Liq. Potass. 3 drachms; Mucilage, one ounce; Aq. Rosee, one pound; Mix.—Dose two tablespoonfuls thrice a day.

A. B. C. Nottinghamshire.—We have many such cases in hand. The fee for private advice is 2*s.* 6*d.*

D. B., Stourbridge.—We cannot recommend anything better than the iodine ointment; a quantity about the size of a bean should be rubbed in, night and morning.—Read our article on scrofula.

Richard Fox.—Must not alarm himself needlessly. Procure two ounces of powdered Peruvian bark, pour over it a pint of boiling water, cover it up and let it stand twenty-four hours, strain off and bottle.—Dose, half a wine glassful thrice a day. Send eight postage stamps; and we will forward some suitable medicines.

Paul.—Sometimes cartilaginous substances form in the knee-joint and move about to the great discomfort of the sufferer: the pain goes away, and then in walking the substance rolls inward to the joint, and creates a sharp pain and feeling of faintness. We would advise him to rub in on the sides of the joint every night and morning, about the size of a bean, of the tartarised antimony ointment. In a short time little pustules will appear, he will then stop, and rub in another part of the joint where there are no pustules. Why not wear a leather cap stuffed and buckled over the knee, since he must kneel so much.

J. H.—States that a quack herb doctor of the feminine gender has been attempting to cure rheumatism, and produces the most extraordinary evacuations from the patient of the colour of glue. We will answer it, for that the herbs produce that effect, and not the disease; and he may rely upon it, the quack will stick like glue to the patient's purse. A character of that kind (for it is our habit to illustrate) once declared to a patient that the disease was produced by swallowing lemon seeds, and gave medicines to bring them away; and sure enough the patient passed so many that he might have consumed half of a grocer's stock; at length some one shrewder than the rest remarking the wonderful size of the boluses ventured to open one, and there to the horror of the sufferer, was discovered a lemon seed carefully imbedded. He reminds us of a duty, viz., that of extinguishing these gentry.—Take of gum guaiacum half a drachm; compound powder of ipecacuanha, half a drachm; confection of opium, ten grains; mix and divide into twenty-four pills.—Dose two at bedtime. Put on a sharp blister behind the ears, and keep it running for a week. Finally, or rather it ought to be, firstly, dismiss the quack.

Amicus.—Refer to our article on Hooping Cough, in number one, where he will find the treatment given at length.

William Lee.—Must communicate privately.

A Subscriber from the first.—Upton.—Two ounces of salts, half an ounce o. cream of tartar, a quart of boiling water, flavour with orange peel: a wine glassful cold every second morning. The system seems vitiated and overheated. Look to the diet.

Mr. Tam o' Shanter and his wife.—For Asthma, see No. 4 of the Family Doctor. Eight stamps will procure him some pills, for Mrs. Tam. —— It is a pity, Tam resembled his namesake in his youth, for a nise man might then have told him, "Tam, ah; Tam, ye'll gt yer ferrin." We should advise the tar water for him now, which is not so pleasant but much more serviceable to him than ale.

Well-wisher.—Dukinfield.—Try the infusion of sarsaparilla, and rub the sores with the golden ointment; keep to a vegetable diet entirely, and use acids, such as lemon juice in your drink. 2nd case, the person ought to procure a truss or bandage from some of the institutions in the neighbourhood. 3rd case, begin with 20 grains of carbonate of iron thrice a day in treacle; the dose must be increased five grains every week. Write in a fortnight. Take also the infusion of Peruvian bark, as ordered to Richard Fox.

T. R.—Alton.—Must either be so incredulous as not to be convinced, or so stupid as not to be reasoned with. None of your bear's grease compounds or quack remedies are of any use, when the hair falls off, the disease is in the roots, and nothing but irritation can stmiulate nature to renew the covering of hair. Nothing but hard brushing can produce the requisite irritation. A man who works hard has horny hands, why? because the constant friction urges nature to provide a thick protective covering for the palm. Wear a wig and no hair will grow. Rub or irritate the skin by rubbing and washing, and in time, nature will throw out a protective covering, which will be hair. When it appears shave it to strengthen it, and after all how does shaving strengthen hair? simply by irritation and cropping. The yolk of eggs act by cleaning the hair to the very root of all scurf or oily matter, and ought to be washed off as soon as they are well rubbed in. The washing removes the yolk, scurf, and all. It may be used once or twice a week; but if T. R. is such a wise critic he must cure himself, if he understands the matter better than we do. He is the only exception we have yet met with of a single reader of the Family Doctor

either complaining of or questioning the correctness of our views. Nature is our guide.

R. T., Sheffield.—It is so much more easy for us to write prescriptions in our usual manner, that this second nature presses often in our way. Some of the prescriptions are written so by request. The pills we have given, and he can have plenty more, and will have under Pharmacy. The correspondence is very heavy at times, and engrosses a considerable space.—We wish our correspondents to be as brief as possible.

Old Man, Birmingham.—This time the handwriting is first-rate: a German degree will entitle to practice anywhere out of London. So will a Scotch one. The charge we have heard is about £18 or £20 for the former. Application is to be made in London, but we cannot say where. In Glasgow a degree will cost perhaps £25, but it is necessary to present certificates of study, &c. There is no difficulty in the way of any practitioner procuring a Degree.

M. R. S., Preston.—Try a little blue ointment, and then the golden ointment; also wear a strip of gold-beater skin over the chapped lip, as exposure to the irritating saliva and atmosphere prolong the mischief.

J. Rowland, Manchester.—No. 3, and one or two others are out of print. The demand is greater than expected. Arrangements will speedily be made to meet it. Send the stamps and he shall have one. The Parts contain all, and we have few besides those in parts.

Notice.—Several letters of the length of Acts of Parliaments have been laid aside this week, because we were compelled to get the work out, and could not find time to read them.—We shall feel sorry if any one is disappointed, but it really cannot be avoided when our friends spin out to such an alarming length—we feel obliged to our correspondents for their kind wishes, and beg them to consider our time, for we really are anxious to oblige them.

The Dialogue next week will be with a miner on the means of preventing and removing choke and fire-damp.

NOTICE TO PRIVATE CORRESPONDENTS.

Gateshead, Fell, neglected to give any address, consequently, we could not answer his letter as we should have done so immediately on the receipt of his communication.

Several Medicines were unavoidably detained, as the letter reached us on Thursday, and remained unopened, until we were preparing the ensuing number.

N.B. Medical Advice will always be given to any person (gratuitously) through the pages of the FAMILY DOCTOR; but it is necessary to give age, sex, employment, symptoms of disease, length of its duration, together with the most probable cause, or at least to describe the commencement of the attack. Any one may have advice through the above medium—viz., *answers to correspondents*, without the necessity of giving their names, or the possibility of their being made known; only, there may be questions which we shall decline answering in our pages, in which cases the patient may correspond with the editor, receiving advice until cured, on payment of 2s. 6d., as a fee, in the outset. In all cases direct to the Editor of the FAMILY DOCTOR, 4, York Cottages, St. Mark's-road, Camberwell New-road, London.

Part 4, *of the* FAMILY DOCTOR, *Price* 6d., *will be ready next week; and may be ordered from any Bookseller.*

THE

FAMILY DOCTOR.

ILLUSTRATED.

No. 19.] OCTOBER 11, 1845. [Price 1½*d.*

ANATOMY, PHYSIOLOGY, AND EDUCATION.

[The present cut represents the base of the brain, or the brain reversed. The reader will at once perceive the hemispheres of the brain, the cerebellum, and the spinal marrow without assistance.]

We have now arrived at the last stage of our subject for the present, and we consider it the most important of all in the application of anatomical and physiological knowledge, to the important question of education. We are all now agreed that the brain is the organ of the mind, and the seat of passion and moral feeling. Many animals possess sense and instinct superior to man, and the brain is developed in them, in a proportionate degree, so as to distinguish the prevalence of these. But they want the united whole, which is so apparent in man. He possesses powers which they do not, nor can ever acquire; whilst, at the same time, he is destitute of none of the characteristics which their development of brain presents. Hence arises his superiority and perfection. Hence his sensibility, judgment, reason, and expression. The capacities, dispositions, and mental endowments of men are so different, that we

are forced to compare the powers of the mind with the development of brain. Man, as he advances in life, enables us to remark this. The intellect of the child is feeble at first: it improves and strengthens with the development of brain, and finally becomes slowly, but surely, matured, as man reaches nearer to perfection, and exhibits a vigorous, active, and grasping mind. We see then how much mind is bound to its sister flesh, and how close the connexion is between mental and physical power,—the one depends upon the other. Mind overtaxed, enfeebles the body; the body overworked, stunts the mind. Yet we too often witness in schools and academies the mental growth encouraged, and forced onwards prematurely, until the body breaks down through disease, and instead of the soaring butterfly of intellect rising from its rugged germ, intelligence is like a snail on the ground dragging a broken shell upon its back. We should never push and urge children to tasks and duties beyond their strength, or foreign to their years. Mind is no more independent of the body, than the arm is of labour: both require, first a task suitable to the powers, and secondly, intervals of relaxation and rest between their toils. Excess is prejudicial, whether in eating, drinking, or teaching. It is against the laws of nature, and at variance with the design of the Creator. Education should be combined with amusement—amusement should be education. Look to the games of our children now. Mark the mathematical lines drawn in some games. What are these now? sport without instruction or meaning, and having only one end, that of exercise. But the ancients were wiser. They arranged the games of children so that in hopping with a round piece of slate over certain lines they might drink in at play lessons of philosophy and truth. We are, however, a civilised people, far in advance of ancient wisdom. We pounce upon the two year old brain, and

immure it within the stifling atmosphere of a childrens' school. We employ the rod and the fool's cap. We make terror supply the place of sport, and place submission in the room of delightful instruction. We frighten children into a thorough disgust of books and learning, by making that a task, which ought to be a pleasure; and whilst pursuing this system of refined torture, we tacitly admit that the mind ought to be treated totally and entirely independent of the body. The physical powers of nature stand no higher, relatively speaking, than a man's clothes, which may be renewed at pleasure,—nay they are never considered at all. Fresh air, amusement, relaxation for the body are laughed at; the mind is the only thing looked to. It is schooled, tasked, and tormented, until the body sinks under the application, and the mind partakes of its langour and exhaustion. But that is laziness, and the remedy is the rod. It is nature asserting her right not to be over-tasked, and she calls philosophy to her aid the moment she has taken pains to point, with sickly finger, to the unnatural, unphilosophical, and disastrous system of education, which has mind for its plaything, and the body for its scourge. Be it remarked also that vacations are given once a year, or it may be twice, to relax, recruit, and invigorate. This is the extremity of an absurd and mistaken system, for long idleness is just as apt to stunt and contract the faculties, as long and overwhelming education. In the one case they are blunted and rusted from want of use, in the other they are crushed, trodden down, and disheartened, by wearisome, exhausting, and often loathsome application. Whatever the mind may be, its seat is the brain, and motion and sensation are essentially physical phenomena. Let us treat the mind then in conjunction with the body, and let their close association teach us to give proper, constant, but light and agreeable tasks to both, never too heavy or irksome, and always relaxing into rest or amusement, when either of these results become perceptible.

We must pursue this important subject, and reason upon it, devoting our first pages to other interesting subjects, suitable for anatomical illustration.

PRACTICE OF MEDICINE.

RINGWORM

Is a most troublesome, annoying and unsightly disease; once introduced to a family, it seldom fails to make acquaintance with all the junior members. It is contagious, and spreads rapidly in day-schools, where a scholar is admitted, who has the complaint; changing caps, and bonnets, so common amongst boys and girls at school, is a certain method of propagating the infection.

Symptoms.—Red pimples appear at first, which discharge a thin acrid fluid. These eruptions appear distinct or in groups, the whole forming a defined ring or circle. In process of time they all combine together in one sore: we have seen it in many parts of the body, although the disease is generally confined to the head. The name arises from the ring, formed by the united pustules, although it does not always retain that form.

Treatment.—The first thing to be done when this well-known, and well-marked disease appears, is to clip the hair very close, but not to shave it, as the irritation of the razor is prejudicial: soft soap should then be rubbed well in, and the head effectually washed; afterwards apply a lotion, comprised of one drachm of sulphate of zinc, four drachms of laudanum, and four ounces of rose water; mix and wash gently with a sponge. Let an oil-skin or silk cap be then placed over the head. Every night and morning the soft soap should be used, then the lotion after the sore has been dried, finally, in about an hour after the lotion is used, the golden ointment, especially at night, should be spread upon a rag, and applied to the ringworm—the hair must be kept always cropped. There will be an advantage also secured by administering treacle and sulphur occasionally. The above system if perseveringly pursued, will certainly cure the ringworm. In old standing cases, a cure is much more difficult: when the scurf is hard, dry, and scaly, and the disease progressing underneath, it will be necessary to loosen the scurf, by applying olive oil night and morning, then the soft soap must be used, and lastly a lotion, composed of one drachm of lunar caustic, four drachms of laudanum, and four ounces of rose water. This lotion we have known to cure inveterate old standing cases, in which the whole head was one ugly scurf. If these directions are followed, and followed with determination, for that is needed when one has to deal with such an insidious and obstinate complaint, we will safely stake our reputation on a cure being speedily and easily effected.

ST. VITUS'S DANCE.

Dr. Charles Bryne, of the United States' Arsenal, near Baltimore, has succeeded in curing several far-advanced cases of this disease, which had resisted the plans of treatment recommended by Drs. Hamilton, Abernethy, and others, by the application of the emetic tartar ointment, along the whole course of the backbone. In the first case a female of a sanguineous temperament, about thirteen years of age, the doctor ordered two drachms of the ointment to be well rubbed on the skin, over the spine, three times a-day, until a plentiful crop of pustules was produced. On the second day the eruptions began to appear, and from that time the patient was not affected with the slightest irregularity of muscular motion. Her mental faculties in a short time resumed their wonted energy, and her health was perfectly restored. From the perseverance with which her mother

continued to rub in the ointment, after the eruptions appeared, her back continued very sore for five weeks longer perhaps than was necessary to remove the cause of the malady. The carbonate of iron is now the general remedy for this complaint, and when judiciously and perseveringly adminstered, it seldom or never fails to cure the disease.

EFFICACY OF THE WORMWOOD ROOT IN EPILEPTIC CASES.

[From *Hufeland's Journal der Pratischen Heilkunde*, April.]

Dr. Burdach, of Triebel, near Sorau, has discovered that the root of the *artemisia vulgaris* (common wormwood) is very a efficacious medicine in epilepsy. This physician recommends that the plant should be gathered in autumn, towards the middle of October, dried in the shade without being washed, and not pulverised till the moment it is wanted. It should be exhibited in the form of powder, and about half an hour before the fit is expected, or at least, as soon as the signs of its approach begin to manifest themselves. To an adult it may be given in the dose of from fifty to seventy grains in some warm liquid. After the patient has taken the medicine, he should go to bed, and cover himself well up for the purpose of promoting perspiration, which he may also aid by taking some warm fluid. When the perspiration has ceased the patient may get up.

Dr. Burdach asserts, that the first dose even affords relief, and not unfrequently effects a complete cure. He recommends the interval of a day between each dose, and gives five cases in which the wormwood-root succeeded. From experiments made at the clinical institution at Berlin, on ten epileptic patients: three were cured, more or less speedily, three relieved, and four not benefitted. The experiment is worthy of a further trial, as remedies for combating epilepsy cannot be too multiplied, till pathological anatomy furnish us with a complete history of this distressing affection, by which we may found a treatment on rational bases. We will give a few of the cases recorded by MM. Hufeland and Burdach.

A woman, aged 41, having made several campaigns with her husband, who was a soldier, became hysterical at the conclusion of the peace, owing, as she supposed, to the want of her accustomed exercise. Two abortions, grief and irregularity in menstruation, very much aggravated her complaint. She was seized with convulsions very similar to those which epileptic persons have, excepting that the stupor was absent. The patient never lost her recollection *in toto*. After her admission she was seized with five or six attacks which were of a true epileptic character. As each of these attacks was announced by a feeling of uneasiness and agitation, the wormwood was given to the patient at 11 o'clock p.m. just as the forerunner of the complaint had exhibited itself. A copious perspiration took place in the night, which lasted till morning. The patient did not sleep a moment, but when she arose felt herself much relieved. On the 17th

of April, however, towards two o'clock in the afternoon, she was suddenly seized with an attack of epilepsy, which was followed by another equally violent, in an hour afterwards. The patient then fell into a deep sleep, and did not awake till the following morning. Sixty-two hours after the first dose, a second was given in some warm fluid. This was soon followed by profuse perspiration, and on the next morning she voided a considerable quantity of high-coloured urine, which, however, had no sediment. The patient found herself much relieved, and in the following morning, the complaint had not returned. On the 6th of May, she quitted the hospital; for two years she has enjoyed perfect health, and has never felt the slightest attack of epilepsy.

A girl, eighteen years of age, subject to epileptic attacks for the lapse of two years, which had been continually increasing in such a degree, that at last she frequently had twelve in a day. After that the patient took three doses of wormwood, the attacks were reduced to two a day, and these were of short duration. For a considerable time past she had no more attacks.

A girl, seventeen years of age, attacked with epileptic fits for the last five years, owing to bad treatment, as she had received some severe blows on the head. The attacks occurred regularly every day and at the same hour. One dose only of the wormwood, which was followed by a slight perspiration, succeeded in effecting a complete cure.

A man, twenty-nine years of age, subject for the last four years to periodical epileptic attacks, which were produced by a fall into the water when in a state of drunkenness, was radically cured by two doses of wormwood.

A man, thirty-six years of age, slightly idiotic, had suffered, ever since his birth, two attacks, at least, of epilepsy every week. Three doses of the wormwood were sufficient to delay the attacks, so that he had only one a month. At last a powerful dose taken once a month succeeded in preventing a return of the attacks altogether.

A girl, sixteen years of age, was subject to epileptic fits, which had come on without any assignable cause. The attacks generally came on every forty-eight hours. One dose only of the wormwood-rcot effected a thorough cure.

THE POTATO.

The history of the potato is most extraordinary, and strikingly, illustrative of the imperious influence of authority. In fact, the introduction of this valuable plant received, for more than two centuries, an unprecedented opposition, from vulgar prejudice, which all the philosophy of the age was unable to dissipate, until Louis XV. wore a bunch of the flowers of the potato in the midst of his court, on a day of mirth and festivity. The people then, for the first time, obsequiously acknowledged its utility, and began to express their astonishment at the apathy which had so long prevailed with regard to its general cultivation.

STATISTICS OF MORTALITY.

CUMBERLAND AND WESTMORELAND, PART OF LANCASTER AND NORTHUMBERLAND.

AREA 1,590,448.

Popul.	Agricul.	Manufac.	Others.	Total.
338,273	24,597	22,257	22,724	69,578

DEATHS

Under 5 yrs.		13 to 21		50 to 60		70 to 80		above 90 to 107		
M.	F.	M.	F.	M.	F.	M.	F.		M.	F.
668	530	13	25	27	20	34	39	„	31	65
210	200	25	17	23	19	25	27	„		31
155	143	14	29	15	31	33	46	„		—
73	93	24	26	27	35	34	44	„		96
67	58	31	36	28	20	36	37	Unknown		10
42	46	30	22	26	29	32	27			
		28	30	31	16	34	49	Total 6,885		
1,175	1,104	34	21	21	18	44	52			
1,104		32	32	33	16	38	34			
				23	26	25	35			
2,279		231	238	41	34	41	59			
		238								
				295	264	378	447			
		469		264			378			
				559			825			

CAUSES OF DEATH.

Epidemic	713	Typhus	160
Nervous	310	Convulsions	83
Respiratory	588	Consumption	439
Digestive	173		

VARIOUS.

Locomotion	20	Child Bed	27
Circulation	15	Violent Death	131
Old Age	331		
Total			2,943

INFUSION OF SENNA.—[This is the basis of the popular drench, the black draught.]

Take senna leaves one ounce and a half, bruised ginger-root one drachm, boiling water one pint,—to stand twenty-four hours, and then be strained. [Note, if to the above, when strained, be added one ounce of treacle, one ounce of tincture of senna, two drachms of tincture of jalap, three ounces of Epsom salts, and five drops of the oil of cloves, the composition is the best form of the "black draught or dose;" of which from one to four large tablespoonfuls may be taken for a dose.]

ACADEMY OF SCIENCE.

PARIS.

(*Translated expressly for the* FAMILY DOCTOR.)

Medical Science.—M. Sediolet, Professor of the Faculty of Medicine at Strasbourg, addressed a Memoir, entitled, *The Anaplastic Method of Cure applied to* CANCER. In a preceding memoir upon an analogous subject, the author expressed several new ideas as to the internal texture of cancer. From microscopic investigation he encountered the existence of cellules in cancerous tissues, presenting a marked and definite character, and affording a diagnosis of the disease, and enabling him to embrace all the phenomena within a theory. To support his views on the anaplastic method, he cites the case of a cancer upon the knee which defied every excision, as well as the cautery. He succeeded in effecting a cure by borrowing a strip of the integument from the leg, and placing it in contact with the wound itself. This is similar to the plan adopted for the restoration of noses, as in that case the integuments destined to form a new nose are borrowed from the brow.

M. Vierordt, a medical man at Carlsruhe (duchy of Baden), communicated the result of experiments made upon himself concerning respirations, and particularly as to the quantity of carbonic acid exhaled during the various stages of man's health. The following are the principal results :—The respiratory functions vary at different times in man according to the different positions he occupies during the day. Thus, for instance, respiration is more frequent after meals. The author estimates the increase at 1·72 respirations per minute, the least number being taken to be 14. The proportion of carbonic acid evolved diminishes instantly after drinking some spirituous liquors, and this diminution continues during two hours.

During exercise the evolution of carbonic acid is three times greater than when the body is in repose.

The increased temperature of the atmosphere diminishes the necessity for respiration in a striking manner. The effects of atmospheric pressure are not so visible as those of temperature, although sensibly felt. Thus, a rise of six lines in the barometer increases the number of respirations by 0.74 per minute.

The general conclusions the author deducts confirm the previously received physiological opinions, and consequently possess considerable weight.

M. A. Robierre furnished a communication relative to a new process for preserving animal substances. The process may be applied to embalming bodies and to the preservation of anatomical preparations, as well as subjects of natural history. The principal substance used is the bi-hydrate of methylene, in which a certain quantity of camphor is dissolved. The process of embalming consists in inject-

ing the liquid into the carotid artery: 2, to cover the body with two coats of varnish: 3, to surround it with fillets of lead and glutin—then to varnish a third time: 4, to introduce into the leaden coffin a jug half-stopped and filled with common salt.

DIALOGUE.

MINER.

"I NEED not ask your trade. You must be a Miner."

"I am, sir."

"Well, what have you got to say?"

"I have come, Doctor, to request you to continue the article on mines. We want to remove the cause of these explosions which you have correctly explained. You have also mentioned the remedies to be employed to restore the suffocated miners to life, but I am afraid we are not of sufficient importance to have a humane society to watch over us, and adopt them."

"Very probable. It is not often that society faces great evils. It prefers sporting with small ones, or making appear to remedy detail. You want to know how the fire-damp and choke-damp may be counteracted when created in the mines."

"We do, sir. You mentioned how the creation of it might be avoided, but money stands in the way of mercy there. Is your plan of destroying our gases very expensive, or does it cost much trouble; for if it does neither, nothing save an act of Parliament will enforce it, and even acts do not reach to many fathoms down. It is a far cry to the furthest coal field."

"Well, I can only explain it to you: I will do my duty so far, and leave the rest to the better and more Christian feelings of society. I have said when there is no moisture, there can be no generation of foul air. The fire-damp or hydrogen gas may be destroyed easily by any of the stronger acids in a state of vapour. In such a case the oxygen of the vapour leaves its base of the acid and unites with hydrogen forming water, but the heat disengaged by the combination converts the water into steam."

"What is the method to be adopted?"

"The following:—a flat strong stone dish must be procured. Then take of common salt 3 ounces, 3 drachms, and 10 grains; of finely powdered black manganese 5 drachms and 17 grains, pound these together and put them in the dish; add to the ingredients 1 ounce, 2 drachms and 33 grains of water; next pour over all through a glass funnel, 1 ounce, 7 drachms, and 50 grains of strong vitriol. The vapour disengaged from the above quantity will be sufficient for a space of 16 feet by 12."

"We would require many such dishes to be used."

"Certainly; they should be placed in different parts, more especially where the fire damp is known to be."

"How often should they be used?"

"That depends on the state of the mine."

"Is this process effectual?"

"Perfectly so: it neutralizes the hydrogen at once."

"What would be the cost?"

"Why that depends on the size of the mine. We should say that £100 a year would be sufficient to meet the demand, for such cheap ingredients, in the largest mine in England. It may be observed the process of fumigation ought to be adopted *after the men have left their work.*"

"How would you remove the after damp, or carbonic acid gas."

"By using lime water and throwing it from a small hand-engine into the quarter where the gas exists, the nipple of the tube having the head of a watering pan attached."

"How does it act?"

"By absorbing the gas. Water at 40 degrees, absorbs equal parts. The water tastes acid, and candles may burn, and men breathe in safety."

"These then are the simple means you would suggest?"

"They are, and a paternal government would at once enforce them."

"If they did: thousands of valuable lives might be saved."

"Doctor, I thank you for your information, and I shall take care to make my comrades acquainted with it. On another occasion I shall ask you a few questions concerning our health."

"Do so; I am proud of being of use to the great army of industry—the source of all our wealth, glory and power."

ANECDOTE.

Among the Polish prisoners of war who were in Russia in 1661, was a distinguished nobleman, with whom nobody was allowed to speak without witnesses. This man became ill, and applied for a physician, which the Czar granted. The physician prescribed *Cremor Tartari.* The doctor had scarcely got home, when he was arrested, and carried before the minister, who, as soon as he entered, addressed him very angrily, calling him a traitor, threatening the severest punishments, exclaiming, "You dog, what have you been talking to the Pole about the Crim Tartars?" The doctor, who stood motionless with astonishment, now comprehended the misunderstanding arising from the report made by some listeners to the minister, and explained it by showing the prescription which he had left with the patient.

SIR ASTLEY COOPER ON BURNS AND SCALDS.

Burns and scalds produce three different effects, vesication, desycamation, and gangrene. If called on when vesication only is produced, there is no danger, although the vesicles be numerous and extensive. The object is to preserve them from bursting, and therefore do not open them on any account, but allow the serum to accumulate in them until a new cuticle is produced; the serum escapes, and there is no further mischief. But if you open them, there is a constitutional effort produced, which is followed by considerable inflammation, and sometimes by suppuration, and the sufferings of the patient are very great. All you can do is to apply evaporating lotions, as the camphorated spirits of wine, or spirits of wine and the lotio alba, to prevent the disposition of which there is in the cuticle, to break. A little opium should also be given to allay the irritability. But when the second effect I have spoken of is produced,—when the burn is severe enough to separate the cuticle from the surface of the body, the most violent symptoms arise; as when a person falls into boiling water or wort.

The exposure of so large a quantity of cutis produces a great constitutional effort in the re-action that takes place; but sometimes a person dies from the shock made on the nervous system, without any re-action having taken place. A child spilt some tea, which ran over his chest and abdomen, and he died in three days; therefore, the dycamation of the cuticle is the worst form of injury, from leaving the cutis unprotected. The spirits of turpentine is the best application in this form of burn; as the object is to excite a speedy re-action; and if you apply evaporating lotions, re-action can never take place. Lime-water and oil, and lime-water and milk, have been commonly used; but the spirits of turpentine is the best application. Where the constitution is irritable, and it gives violent pain, dilute it with oil, or with oil and lime-water, and I think it could then form a very good application. Give opium and wine as long as the chilly state continues, but as soon as the heat is developed, and the pulse has recovered its power, do not continue it longer, but employ other means to reduce the inflammation when necessary. Turpentine does not succeed when the scald is produced by hydrogen or carbonated hydrogen gas, so well in London as in the country.

The third state is, where the life of the skin is destroyed to a great extent, there is no immediate danger, for the constitution does not suffer in the first instance; this is to be apprehended when the sphacelated part begins to separate. The absorbents act briskly, and a great discharge follows the separation of the part. Fomentations and poultices are most useful in these cases; as the turpentine cannot act on the dead surfaces, it is necessary to give wine and opium, as in the former case, during the chilly state; the treatment

is just the same, indeed, as in the case of gangrene: toward the end, when the process of suppuration is commencing, you may give wine and opium, or ammonia, to support the constitution.

These cases produce the most remarkable deformity. These result often, from the surgical treatment, and after the cicatrization has been completed. They are owing to the natural tendency which there is in the cicatrix to contract. The wounds often heal smoothly, but afterwards become puckered: these contractions are apt especially to occur in the neck, by which the skin is united to the chest; and if the arm be the burned part, the fore-arm becomes united to the upper-arm. The fingers become united to each other, and the thumb is sometimes bent very much backwards. This contraction may be prevented in the arm, by passing a splint behind the arm, and keeping the arm extended on it. The same rule should be attended to, if there be any danger of the thigh uniting to the abdomen. You should pass a splint behind the thigh, and keep the thigh extended on it, and the contraction will be prevented; but as to the neck, do all you can, by bending the head back, or, to either side, yet the contractions will take place. When cuticle is removed, and the cutis is in a granulating state, you may produce cuticle over it very quickly, by using the acetate of zinc wash, made by putting two grains of the sulphate of zinc to one ounce of the liquor plumbi sub acetatis dilutus: this object is sometimes well accomplished, by sprinkling the granulations with the oxide of zinc.

But the lotions appear to be the best: some lint should be dipped in the lotion, and laid on the wound; over this some folded linen should be placed, and over the whole a piece of oiled silk, to prevent evaporation.

THE LATE JOHN ABERNETHY'S DIRECTIONS FOR MAKING A POULTICE.

Well, now, as I have told you how to make a bread-and-water poultice, I shall now describe the manner of making the greasy poultice. Scald your basin, by pouring a little hot water into it, then put a small quantity of finely-ground linseed-meal into the basin, pour a little hot water on it, and stir it round briskly until you have well incorporated them, add a little more meal and a little more water, then stir it again. Do not let any lumps remain in the basin, but stir the poultice well, and do not be sparing of your trouble. If properly made, it is so well worked together that you might throw it up to the ceiling, and it would come down again without falling in pieces; it is, in fact, like a pancake. What you do next, is to take as much of it out of the basin as you may require, lay it on a piece of soft linen, let it be about a quarter of an

inch thiek, and so wide that it may cover the whole of the inflamed part. Then take a bit of hogs-lard on the top of your knife, and put it in the centre of your poultice, and when it begins to melt, draw the edge of the knife lightly over the surfaee of the poultice, and you will spread the grease over it. It is now ready to be applied, and it is what I call a *greasy* poultice. Oh! it is one of the best applications which can be made to an inflamed and irritable part, provided the linseed-meal with which it is made is sufficiently fine; but I never see any sueh thing now as good fine linseed-meal, it is all pressed into oil cake and given to cattle to fatten them.

It is, when made in this way, oh! it is beautifully smooth; it is delightfully soft; it is warm and eomfortable to the feelings of the patient, and it is the best applieation that can be made to an inflamed part, as I have before said. The reason why I have lately preferred bread in the composition of the poultiee is, beeause I cannot get the linseed-meal in a sufficiently fine powder. So much for the greasy poultice.

TWO HEADS BETTER THAN ONE.

Fabrieius Hildanus, a great physieian and very good surgeon, once happened to find himself singularly embarrassed. He was ealled to see a peasant, into whose eye flew a sparkle of iron. He attempted different ways to extract it, and even made use of some instrument with a view to that effeet; but the sparkle eseaped him by its tenuity, all his operations served only to oceasion a violent inflammation in the eye of his patient. Fabrieius returned home quite pensive, despairing of sueeess, when his wife, being informed of what had passed, began to laugh at her husband's manner of treating the aeident. The doetor, finding himself "at fault," did not argue the ease with her, lest she, in her turn, should be reduced to a similar dilemma; and she being desirous to enjoy her triumph over him, told her husband that she would be glad to aeeompany him to the patient, eonceiving that she might be of some service to him. Little thinking that any further attempt would be attended with sueeess, Fabrieius assents to everything, and obeys his wife, who bade him hold the patient's eye as wide open as he eould. This done, she forthwith drew out of her pocketa loadstone, whieh she moved about, as near as she could to the surfaee of the eye, and the same instant the sparkle of iron flew out toward the loadstone, and the patient found himself instantly relieved. Fabrieius's wife, as may be well guessed, did not remain mute upon the occasion. She reeeived the testimonies of the peasant's gratitude; but what undoubtedly flattered her most was her husband's acknowledging that, had it not been for her, he should not have had the least idea of so fortunate a resource.

JOKES FOR INVALIDS.

QUACKERY.—EXTRAORDINARY CURE.

BRUNELL, the engineer, has made an affidavit, before the Lord Mayor, that the afflicting and long-continued dropsy from which the Thames Tunnel was suffering, was radically cured after the application of two pots of Holloway's ointment.

SINGULAR.

Inspector Mallileu, of Greenwich, purchased only one box of Holloway's ointment the other day at the apothecary's, and encountering a pickpocket escaping from the police, he at once threw it at the fellow's head, and cured him of the most desperate running with which any poor devil was ever afflicted.

UNION BY THE FIRST INVENTION.

IT is astonishing how soon nature causes wounds to heal, if union is speedily resorted to. People scarcely believe it possible. The aid of common adhesive plaster is generally necessary, but in the first instance, even a strip of old linen will answer the purpose. Delays are particularly dangerous, as a serious re-action in the constitution may arise.

Case.—A needy town exquisite, who had received an alarming wound through his purse, encountered the other day, at Almacks, a splendid country fortune; feeling the necessity of bringing the *rent* together, his *first intention* was *union*. That was so speedily effected, that guardians and relatives did not credit the possibility; the common license plaster could not be conveniently procured, but the Gretna-Green rag answered the same purpose. Delay in this case, would, according to every symptom, have produced a very serious effect upon the *credit* of the beau. PROBE.

FRACTURES OF THE FINGERS.

When the contusion of the hand or fingers is very considerable, amputation is most advisable; but if the part can be saved, the following directions are to be attended to. Having placed the fractured bone properly, and reduced the fragments, that is, having reset them in their proper places; a piece of firm pasteboard exactly fitted to the part may be applied, softened in water, to allow of its being moulded to the form of such part, and then it is to be rolled up with a narrow fillet to the next finger. Begin the bandage about the wrist, carry it over the back of the hand to the finger; and if more fingers than one are fractured, carry it round each separately, then round them all; and place the hand in a sling.

A large splint of pasteboard, or thin wood, glued on leather, should also be applied on the inside of the hand, the fingers stretched on it, and secured by the roller over the whole.

In fractures of the larger cylindrical bones due apposition of the fractured ends is to be strictly attended to, and confined there by means of splints and bandages.

TO CORRESPONDENTS.

S. I. P., Galen, Manchester.—The trade is the cause of the mischief; cough mixtures are of very little use. If he could procure some Turkey Rhubarb and chew a piece of it occasionally, he will benefit from it. Take twice a week four grains of extract of colocynth, and as much exercise as he possibly can.

Amicus, Leightonstone, Essex.—Answered last week.

Jennings Lees writes us a very flattering letter as to the results of our advice to him. He seems rejoiced at the appearance of such a champion for truth and the working classes, and he may depend upon it, he is not far astray as to our determination to dissect the present system of overwork, and its physical results to mankind. We pursue no factious course, but one of right, reason, justice, and mercy to our fellow men; and few have a better chance of serving their fellow creatures then medical men. We thank him for his kind wishes. He may try the infusion of Peruvian bark, say two ounces to a pint of boiling water, half a a wine glassful thrice a day. Add a little carbonate of soda to each dose.

Z. S., Manchester.—It seems a very curious case altogether. Is she perfectly sensible and rational? We should very much like to see such a case. If fright produced the effects, then the disease is decidedly in the brain, and in such a case, the hair should be cut short, or shaved, and a blister put on the back of the head, to be followed up by the cold water dash over the head every morning. Although we have not heard anything respecting her state of mind, we cannot avoid arriving at the conclusion that the seat of the disease is in the brain itself. The sense of hunger is governed by the nervous system, and most probably there is a partial paralysis of the ninth pair of nerves. Sulphate of quinine will be the best medicine, and a clyster administered occasionally will stimulate the action of the intestines. Such is the treatment we would recommend, and it has one advantage, the result will very soon be made apparent—the quinine is dear, and often adulterated, 2s. or 2s. 6d. worth will last some time.

Negæ Tropp.—Sponge the body every day with vinegar and water. Keep the bowels regular. I need not say to a hand-loom weaver, don't drink, for the poor plundered fellows have not wherewith. Buy two ounces of Peruvian bark, make an infusion with a pint of warm water. Let it stand covered twenty-four hours. Dose, a tablespoonful thrice a day.

S. G., Agbrig.—There are plenty of remedies, and he knows the fee.

G. M. S., Manchester.—For the child. Take oil of aniseed, three drops, sweet spirits of nitre, one drachm, manna, two drachms, syrup, one drachm and a half, mucilage, three drachms, water, five drachms. Mix. A small teaspoonful thrice a day. A little castor oil will be useful. The mother must take five grains of extract of colocynth, and a wine-glassful of salts in the morning, twice during the week after the receipt of this.

John W., Hanley.—Send eight stamps. Procure some quassia chips, say a quarter of an ounce; add a quart of boiling water, cover; stand for twenty-four hours; strain; add half an ounce of sweet spirits of nitre. Dose, a wine-glassful twice a day.

W. B., Openshaw.—Two assafœtida pills every second night. A table-spoonful of infusion of Columba, to which add half an ounce of tincture of rhubarb, an ounce of Columba root, sliced down, will be sufficient for a quart of boiling water. Cover close; leave standing twenty-four hours, then strain.

Teetotaler, Bridge-house, Sheffield.—Eight stamps can procure him a box of pills of our own compounding, the receipt for which we do not choose to give. For the shoulder, nothing is so good as rubbing with an embrocation composed as follows. Spirits of hartshorn, soap liniment, equal parts, rub night and morning. Wear flannel.

J. C. A., Leeds.—The trade again. The dust is the cause of the mischief. Either leave the place, or wear, for instance, a buckram mask, which is cheap enough; never mind the fools who may laugh at you. You will stand on their graves. No medicine can be of any avail so long as the cause is not removed. We must give a dialogue on the subject next week. Send all the information he can by return.

W. A., Manchester.—What is the nature of the swelling? What has been the cause? How long has it been in existence? Has he ever taken mercury? We cannot guess, and if we did, it would be either dangerous or absurd.

The Unfortunate, Macclesfield—If the bones are bent, we can recommend nothing, save time, and strengtheniug the system by generous diet. Add a teaspoonful of muriatic acid to the water with which he sponges himself. Try the infusion of Peruvian Bark.

Phœbe, Belvoir—The complaint is very common. We call these knots varicose veins. The veins become so much enlarged, that the valves within them, similar to those of a force pump, become useless, andc annot support the column of blood returning from the extremities to the heart. Hence the swelling of the ankles, especially at night, or after exercise. An elastic bandage should be worn, or an elastic stocking to support the leg. Salt and water will do no good—The varicose affection may be removed by a simple operation, viz., that of inserting a needle under the vein, and crossing a thread over the two ends, so as to stop the circulation altogether.—The vein is obliterated, the disease removed with it, and the blood finds another channel through its numerous ramifications. The pain is trifling. We think we have put you in possession of all the knowledge you require.

G. R. S. A., Leicester.—Too many doctors are like, too many cooks. Take—Tinct. secal. cnorut., 3 drs. Infus. Rosæ., 5½ oz. Mix—Dose, a table-spoonful every three hours.

Smith, 20, *Holland Street.*—The infusion of sarsaparilla is the best thing.

Xerces, Manchester.—Certainly; we have treated and cured many. Postage stamps.

Mc Donald, Edinburgh.—Cannot possibly expect us to answer such questions in the pages of the FAMILY DOCTOR. People who will have answers of such a nature, can only expect to pay for them; for we shall decidedly not stain our pages with anything that may chance to offend the delicacy or affront the the feelings of our readers. The notice to private correspondents stare every reader in the face.

NOTICE.—We must again beg of our correspondents to have mercy upon our time and patience; some of the letters are really of a length to frighten even a lawyer. The reading alone occupies two hours. Cannot our correspondents answer thus—Age, 20; sex, male; employment, tailor; disease, indigestion; cause, confinement; afflicted 6 months; treament, state the medicine used; lastly, symptoms. Such as headache, water brash, changeable appetite, costiveness giddiness, &c., &c.

To the News Agents and Readers.—Many of the numbers of the FAMILY DOCTOR being out of print, and not to be had except in the parts we have resolved to bring the first volume to a close with our 26th number; after which we shall begin a new series. Previous to that time we shall have re-printed the numbers wanting, and any one can have sets complete, or the 1st volume complete with our 26th number. The new series will be still further improved, and rendered worthy the unexpected encouragement we have received. The printer had better be informed of the number of copies required by the agents.

N.B. Medical Advice will always be given to any person (gratuitously) through the pages of the FAMILY DOCTOR; but it is necessary to give age, sex, employment, symptoms of disease, length of its duration, together with the most probable cause, or at least to describe the commencement of the attack. Any one may have advice through the above medium—viz., *answers to correspondents*, without the necessity of giving their names, or the possibility of their being made known; only, there may be questions which we shall decline answering in our pages, in which cases the patient may correspond with the editor, receiving advice until cured, on payment of 2s. 6d., as a fee, in the outset. In all cases direct to the Editor of the FAMILY DOCTOR, 4, York Cottages, St. Mark's-road, Camberwell New-road, London.

Part 4, *of the* FAMILY DOCTOR, *Price* 6*d., is now ready; and may be ordered from any Bookseller.*

THE

FAMILY DOCTOR.

ILLUSTRATED.

No. 20.] OCTOBER 18, 1845. [PRICE 1½*d*.

ANATOMY.

THE MUSCULAR SYSTEM.

THE important ends served by the muscles of the body in regard to circulation of the blood, respiration, digestion, and motion, render the study of their uses and functions most important to man.

Exercise and the laws which should regulate it, come under this head, and involve physiological principles, which materially concern

the preservation of health and the maintenance of mental and bodily vigour.

The skin ought, properly speaking, to form the first subject for illustration and remark, but we reserve its study to a future period. On removing the skin, the body presents the appearance exhibited in the cut. These distinct and compact bands are muscular fibres; they compose the fleshy portion of meat. On examining a beef steak, any one may observe the fibry lines threading along the muscle, and a shining tough membrane dividing one muscle from its neighbour. With the finger or a knife, they are easily separated one from the other. The intervention of this membrane admits of perfect freedom of motion for each distinct muscle, because it binds or forms a sheath around each muscular band of fibres. The membrane thus covering and separating one muscle from another is called the cellular membrane, on account of the presence of numerous little cells in its structure. In these cells fat is deposited, and hence the intervals between the muscles are filled up, and when covered over with the skin, give a rounded instead of a rugged form to the limbs.

There are upwards of 400 muscles in the human body, all of which are named, classified, and studied by medical men. They lie over each other in layers, as for instance in the thigh, represented in the cut, which merely gives the appearance of the superficial layer. If that upper layer was removed, another would appear beneath it.

All these muscles may be divided under two great primary heads, viz. those which are *voluntary* in their action, and those which are *involuntary*. For instance, the first mentioned set, act only in obedience to the will, as exemplified in raising or lowering the arm, opening or shutting the hand, &c. The second mentioned class on the other hand, form, as it were, the main-spring of life, and are not left under the controul of man's will, lest he might forget at times to use them. This is demonstrated by the beatings of the heart, which we shall prove hereafter to be only a great muscle. It would not do to leave that to be moved by man's will alone. It beats on until it is stopped by death. Then again there are the lungs, which maintain respiration continually, asleep or awake. The stomach itself, during its contractions in digestion, as well as the *vermiform*, or worm-like crawling of the intestines, form another example of involuntary contraction. The end and intention of these two classes of muscles are opposite. The heart for instance, is formed to beat, or be in a state of constant action, whereas every one knows how soon the voluntary muscles of the limbs, after a long day's walk, will seek repose and cease to act altogether. The involuntary set, then, are continually in action, and intended to be so, until man's limited term of existence is finally run down. The voluntary, on the other hand, are only capable, and only designed, for alternate action and relaxation. The first never rest, save with life. The last always seek rest after exhaustion.

Notwithstanding the above classification and its distinct features, the muscles are arranged according to their functions, and according to the regions of the body in which they act. To enter upon these arrangements and describe them, would only confuse the reader, as they mystify many thousands of students. We therefore proceed to another point, viz. the power and method by which voluntary and involuntary muscular action is maintained. The reader will comprehend our arrangement of subjects when we remind him of our long articles on the brain and nervous system.

The brain is the origin of all motion, the guide and rule of all movements. The nervous filaments distributed like the threads of a leaf, throughout all the muscular fibres enable them to contract and expand, according to the will. For instance, I *will* to bend my fingers, the nerves put them in motion, and the action is done. I will to extend them, and the same influence effects my wish. Thus muscles which require violent contraction or great power, have numerous nervous filaments distributed amongst them, justifying the expression of "a nervous arm or nervous man" meaning, a strong powerful

muscular person capable of raising or moving vast burdens. That it is true that the nerves do exercise power over the muscles, and that the latter act in obedience to the will, mark the suspension of all motion in palsy, a disease in which the brain is affected and the nervous system paralysed. The muscles are there, but where is the power to move them. Injuries, sleep, drink, opiates, all produce a like effect on muscular action from upsetting, disordering, or paralysing the brain and nervous system. The walk becomes unsteady, the utterance irregular, and motion or speech altogether suspended. On the other hand, the co-operation of nervous and muscular action is beautifully exhibited when the brain is clear, in rope-dancing, sleight-of-hand, engraving, etching, and drawing, raising one's hand, writing, walking, dancing, &c. &c. The use and intention of the muscles are to contract and relax. Let, for instance, a man bend his arm, raising his hand towards his shoulder, and he will see what a puffed pudding-like lump he has on the arm above the elbow; that is caused by muscular contraction; let him extend his arm, it is gone; that is owing to the relaxation of the fibres. Let the reader remark the large muscle of the thigh, that when it contracts, being attached to the knee-cap and bone of the leg, brings the leg forward as in walking. The two broad bands of muscles over the abdomen, also, when contracting, as they can do, from above or below, or inwardly, raise the lower extremities, as in tumbling; lower the chest as in bowing, or compress the abdomen to assist the evacuations.

Next week we shall show how the muscles contract, and explain that process, after which we shall turn the united information to the means of exercising the body and preserving health.

CHEMISTRY.

The atmosphere being the element by which we live, and move, and have our being, it is very necessary that every one should understand its composition, uses, and properties, as a preliminary chapter to our intended essays on the lungs and the circulation of the blood.

We shall consider it under different heads :—1st, its composition; 2nd, the theory of its combination; 3rd, its properties; 4th, its gravity; 5th, its pressure; 6th, its elasticity.

Chemists have all agreed, with slight variation, in fixing its component parts to be as follows:—In every 100 measures of pure atmospheric air there will be found 20 parts of oxygen and 80 of nitrogen; that is to say, there will be just about 20 per cent. of oxygen. Such, therefore, is the constitution of pure atmospheric air; yet it is never absolutely pure, as there is always held in suspension a quantity of carbonic acid, watery vapour, and the odoriferous matter of flowers and other volatile substances. 100 cubic inches of

oxygen weigh 34·454 grains. The same quantity of nitrogen weighs 30·15 grains; but the same bulk of carbonic acid weighs 47·377 grains, being evidently by far the heaviest gas in the atmosphere, which facts would lead us to conceive that, according to the theory of gravitation, the heaviest gas would be found in the lowest regions of the air, and the lightest in the highest. That there is no tendency of this nature is sufficiently known, as the component parts of the atmosphere are the same in every clime, in every altitude, and in every depth which has yet been gained. Air brought from the summit of Mont Blanc was found to contain the same proportion of carbonic acid, oxygen and nitrogen, as in that collected at the shortest distance from the surface of the earth. The miasma of marshes, and the effluvia of infected places, must owe their injurious qualities to some principle of too subtle a nature to be discovered by all the researches of chemists, as the infectious atmosphere of an hospital, where the odour is intolerable, is nothing deficient in the ordinary composition. This naturally leads us to the consideration of the theory of the *combination* of the *gases* of which the atmosphere is composed. If we place carbonic acid in a vessel, and attach above the same vessel another containing hydrogen (the lightest gas in nature), in a short time the hydrogen will be detected in the lowest, and carbonic acid in the highest; consequently, the combination of gases of unequal weight is proved, that of one gas ascending through another 22 times lighter than itself. The same will be observed in a mixture of oxygen and nitrogen. The atmosphere possesses all the qualities which should arise from a mechanical mixture. There is no change in bulk, form, or other qualities. The nitrogen gas manifests no attraction for oxygen, as the latter can be as easily extracted from the air as if nitrogen never existed. Since the atmosphere cannot be in a state of actual combination without running against the law of gravitation, the exact nature of their proportions must be accounted for on some other principle. The assumption is that the particles of one gas, though repulsive to each other, do not repel those of a different kind; it then follows, that one gas will act as a *vacuum* with respect to another, therefore, when the two vessels, containing carbonic acid and hydrogen, were brought in contact, the particles of each gas insinuated itself into those of another, until they became equally diffused through both. They do not, indeed, rush in with the velocity of water into a complete vacuum, as the particles of one gas present a mechanical opposition to those of another, yet, in process of time, the distribution of the gases is equalized as well as if there had been a complete vacuum. This accounts not only for the mixture of gases but for the equal distribution of vapours throughout gases, and maintaining these gases in uniform intermixture. The chief *properties* of the atmosphere are owing to the presence of oxygen gas, air, from which this principal has been withdrawn, is nearly inert; no animal could exist in it, and all combustion would cease. All the changes, which mineral and dead matter undergo, are chiefly owing

to the presence of oxygen. The uses of nitrogen are almost unknown; it is considered to be a mere dilutent to the oxygen, and whatever properties it may possess have not yet been ascertained. Since air is dependent on oxygen for its different and many properties in the economy of animals and all the different uses of nature, it must be evident that, unless there were some means by which a continual supply was kept up, it would necessarily decrease by combustion, by the respiration of animals, and other natural operations. The only means by which we obtain it is by the action of growing vegetables; a healthy plant absorbs carbonic acid during the day, applies it to its own wants, and the oxygen it contains is set free. During the night, however, oxygen gas disappears, and carbonic acid is evolved, rendering it dangerous for any person to sleep near decaying vegetables; however, by accurate experiment it has been ascertained that plants, during 24 hours, yield much more oxygen than they consume. This is the only known method by which it is procured; but whether this makes a full compensation for the oxygen removed from the air by these causes is not easily ascertained, as the effects of any deteriorating process would be gradual, from the great extent of the atmosphere, and the frequent motion to which it is subjected by the action of winds. It could not be very easily known, unless observations were made at the interval of centuries.

Now when we have considered and proved the composition of the air, and how one gas intermixes with another by becoming vacuums to each other, and then of the properties of the fluid, we will next proceed to the fourth part of the division, viz, gravity.

PRACTICE OF MEDICINE.

The most common diseases of children we conceive to be a useful subject of which to treat, as recommendations under that head may benefit and assist many poor families. We shall begin here by alluding to that common affection of

NETTLE RASH.

This complaint is distinguished by an eruption of the skin, and is so termed because of the similarity of appearance between it and the stings of nettles. The skin is hot and dry at first ; a slight intermittent fever precedes the eruption itself, and continues during the attack. There is also considerable itching, and the annoyance and irritability make the child fretful, uneasy, and flushed. The affection is more evident towards nightfall. On touching the skin, or on rubbing down the back and loins, there is a feeling of gritty substances under the skin, the swelling making the sensation more perceptible. The *cause* is owing to some indigestible matter on the stomach, for we know now that these skin eruptions have almost always their origin in the stomach and bowels. They are external

signs thrown out by nature to announce internal irritability, or inflammation of the mucous membrane lining the bowels and intestines. As a proof of that, an eruption of a closely similar character may be produced by unwholesome shell fish, the cause being the indigestibility of the substance lying upon the stomach.

A sudden exposure to cold, so that the perspiration is suddenly arrested, also will give rise to similar attacks, but we know, even in this case, that inflammation of the bowels if not commenced, is at least threatened.

The *treatment* is very simple. If the existence of irritable or indigestible substances can be proved to exist, and if an hour or two have not elapsed since they were taken, a slight emetic should be administered, and the cause of mischief at once removed. The readiest emetic is a small quantity of mustard and warm water, or a little antimonial wine for young children. We highly approve of a warm bath, after which two or three grains of calomel, and from five to ten of jalap should be administered. Cream of tartar water is the best drink. At bed time four or five grains of James's powder may be administered in a hot drink to promote perspiration, or the prescription may be changed thus : three grains of calomel, and instead of jalap, two grains of antimonial powder.

CHICKEN POX.

This is a disease very liable to be confounded with small pox, and at first, there is frequently considerable difficulty in distinguishing between the two. The distinction can, however, be easily arrived at, provided the following observations are attended to. In chicken pox, fever precedes it, but the fever is of a very irregular character, and intermittent kind. In small pox, the fever is continuous, and endures for a uniform period. Again, in chicken pox, the pustules contain only a watery serous fluid, whereas, in small pox, the pustules always contain matter. Finally, in chicken pox, the pustules flatten, and begin to die away about the fifth day ; whereas in small pox, the pustules will not be at their height before the ninth day. These distinctions will, in general, enable any one to form a correct opinion of the disease, although there are cases in which it is very difficult to decide, and where, in fact, the appearance of the pustules would argue the possibility of both diseases existing together.

The treatment is simple, here, also; for in fact, the disease is not at all dangerous. Calomel and jalap in the doses stated, together with tamarind tea, and cream of tartar drink should be administered. In the commencement, nothing can be superior to the warm bath and James's or Dover's powder. The chief thing should be to get the bowels freely open, and for that end, the calomel and jalap or rhubarb should be given every two or three hours, until the bowels are open. Care should be taken to avoid extremes of temperature, but on no account should children or young persons be cooped up in a close room, or stuffed in flannel. Why ?—because nature shows she seeks an outlet by the skin, to avert internal

inflammation. Block up her passage, and she will, as we have often seen, fall back upon the brain, lungs, or bowels, and the little patient be destroyed by acute inflammation.

SORE EYES.

This is a very common disease of children, and often appears after birth, causing many to suppose it has been born with them. Cold is more frequently the cause, or irritable matter getting into their eyes when they are being washed. Holding children to a glaring fire, showing them strong lights, &c., also cause the affection. The eyelids swell, become very red, and finally discharge matter of a purulent kind.

The *treatment* is to avoid these causes, to administer a little castor oil, or two grains of calomel. The eyes, instead of being washed with soap, should be bathed with milk and water every night and morning, or with a weak decoction of camomile flowers. No spirits must be used, as they often produce the inflammation when used as a wash; nor should the child be exposed much to light and air.

A lotion should be used frequently, composed as follows:—Sulphate of zinc, one scruple, rosewater, half a pint, laudanum, four drachms, mix. Apply with a piece of new sponge, merely wetting the eyelids. Take care to apply that sponge to none of the other childrens' eyes, as they may become similarly affected.

TONGUE-TIED.

Mothers show often great anxiety about this affection, and frequently insist on the bridle of the tongue being cut, whether there is a malformation or not. We have known many husbands who showed no particular anxiety for letting the tongue loose, especially when the children were females. Be that as it may, if the child can suckle well enough, there is no need of any haste for the operation, and when it is done, let every one remember that exactly behind the bridle of the tongue there is an artery which an inexperienced person may cut, and cause the child to bleed to death. Much caution is requisite, and with such restless patients a quick, steady, and tried hand ought to perform the trifling operation, instead of druggists and apprentices, many of whom do not know of the existence of the artery, or the danger to be incurred.

PHARMACY.

Decoction of Bark.—Best bark well bruised two ounces, water one pint, boil for fifteen minutes in a closely-covered saucepan, and strain while hot, *i. e.* about ten minutes after it is removed from the fire.

Compound decoction of Aloes.—Spanish liquorice half an ounce, subcarbonate of potass two scruples, best aloes bruised, myrrh bruised, cake saffron, of each a drachm, water a pint; boil until one-fourth be evaporated and strain, then add compound tincture of cardamoms four ounces.

WINES.

Ipecacuanha Wine.—Best ipecacuanha root bruised two ounces. Best pale sherry (not Cape) two pints. Let them stand for three weeks, shaking the bottle once a day; then strain and keep in the same manner as the tinctures.

Antimonial Wine.—Tartarised antimony forty grains, boiling *pure* water two ounces; sherry wine eight ounces; treat as above.

Steel Wine.—Pure iron filings (collected by a loadstone); sherry wine one quart. Set them aside for two months, shaking daily; then filter through muslin four times; keep as the others.

OINTMENTS AND CERATES.

Yellow Basilicon.—Pure hogs-lard without salt eight ounces; white resin five ounces; yellow wax two ounces; melt in an earthen pipkin, and keep closely covered. *Note.*—When melted it should be stirred till cold.

Healing Ointment, and Blister dressing.—Pure hogs-lard without salt one pound and a half; white wax four ounces; melt in an earthen pipkin, stir till cold, and keep in a closely-covered jar.

Ointment for the Itch, and for Ringworm.—White hellebore root powdered two ounces; sulphur in powder six ounces; liquid tar four ounces; soft-soap six ounces; pure hogs-lard six ounces. Slowly melt together, stir till cold; keep as the other ointments.

MIXTURES.

These should be made in small quantities, *i. e.*, half or three quarters of a pint; and keep closely corked.

Chalk Mixture.—Creta (prepared chalk) half an ounce, white sugar three drachms, pulverised gum arabic half an ounce, pure water or peppermint water one pint. *Note*—As this will not keep well, the powders had better be kept ready prepared, that the water may be added when wanted.

Steel Mixture.—Finely-pulverised myrrh one drachm, subcarbonate of potass twenty-five grains, sulphate of iron one scruple, rose water eight ounces, white sugar one drachm, spirit of nutmeg half an ounce. Rub together the myrrh, subcarbonate of potass, and sugar, then add gradually the rose water and spirit of nutmeg, and *lastly* the sulphate of iron.

Plummer's Pill.—Calomel one drachm, precipitated sulphuret of antimony one drachm, gum guaicum finely powdered two drachms, balsam of copaiba, sufficient to moisten the mass to a consistence for making pills. This quantity will make fifty-five pills. *Note*—The powdered guiacum must be rubbed for a long time with the other ingredients before the balsam be added.

Blue Pill.—Of purified quicksilver two drachms, conserve of roses three drachms, powdered liquorice-root one drachm. Rub the mercury and the conserve together in an iron mortar for *four* or *five* hours, then add the liquorice powder and rub for two hours longer. Keep covered up.

Steel Pill.—Pulverised myrrh two drachms, sulphate of iron one drachm, white sugar *in fine powder* one drachm, subcarbonate of soda one drachm. Rub well together in a mortar, and then add a few drops of syrup to make the mass of a consistence for pills, and divide into fifty pills.

Rhubarb Pills.—Best pulverised rhubarb one ounce, best aloes in powder six drachms, myrrh also in very fine powder four drachms, essential oil of peppermint half a drachm. Mix well in a mortar, add a few drops of syrup to give it consistence, and divide into pills; one drachm to twelve pills.

Cooling Lotion; Goulard Water.—Super-acetate of lead (called sugar of lead), forty grains; pure vinegar, two teaspoonsful; *rain* or distilled water, one pint. Mix.

DIALOGUE.

THE FLAX DRESSER.

"So you are employed in a Flax Mill?"

"I am, and I should like to know what precautions to adopt, or what remedies to use, to cure me."

"What are your symptoms?"

"A very great difficulty of breathing, an occasional cough, tightness over the chest, and a feeling of suffocation at times. I spit a vast quantity of a dark yellowish matter, or what is perhaps as disagreeable as the other symptoms, I have a sense of fullness after meals, a swelling of the body, as it were, disturbed rest, and little refreshed by sleep. My digestion is very bad."

"All these are formidable symptoms, but I presume you know the cause?"

"I do, sir; I believe it to be the dust and flakes flying about the workshops."

"You are quite right; the same thing applies to scutching-rooms in cotton mills, and you may observe, that persons employed either amidst flax, wool, or cotton flakes, present, invariably, a sallow, sodden, and pale, anxious countenance. It cannot be otherwise, as we proved when on the subject of consumption. All dust of a metallic or fibrous nature is injurious, the former, however, being more fatal than the latter."

"How does it act upon the constitution?"

"By and bye, I shall treat upon the lungs and the heart, and prove that the vitiated blood of the body returns to the lungs to be purified with the oxygen of the atmosphere. To facilitate the purification, the air-passages of the lungs are lined with an extremely thin membrane. Suppose the blood to be, as it continually is, in a state requiring oxygen, and without which no bodily vigour or hilarity of mind can be acquired, as witness the gradual sinking and dullness of

spirits in a crowded ball-room, and the constantly increasing pleasure of a ride, drive, or walk into the country."

"I can believe that, sir, for we have to go no further than our mill, the sensation when in, and the feelings when out, are very different."

"I can fully credit that, well. Nature requires fresh air; you cannot get it in an atmosphere filled with abominable fusty smelling matter, oils, and gas; and that is bad enough in itself, but it is nothing, compared to the inhalation of scores of flakes with every breath. Some go into the lungs and irritate the air tubes; the mucous membrane throws out matter to protect it with as much alacrity as the eye when a spark lights upon it; the membrane being tickled by the foreign substance, a cough is excited, dry and frequent at first, then becoming duller, and as the flakes sink deeper and deeper, tubercles are formed, consumption sets in, or asthma makes its attack. In the later stages I have known men remark that they spat up as much matter as the food they eat during the day. Then comes the drag on the constitution, when more is wasted than is eaten to supply the wants of the body."

"You spoke of the flakes going somewhere else."

"True. Part of the flakes enter the lungs; part go down with the spittle into the stomach—are in fact swallowed. Now, although the stomach is more used to tough matters than the lungs, it was never designed to digest flax, any more than to digest a cable-end. The functions of the stomach become gradually disordered; indigestion results, and a long train of afflictions set in to worry and weary out human endurance. The lungs and stomach once thrown out of order, every other organ feels the mischief. A boiler leaking, or an engine asthmatic, soon make all the rest of the machinery go at an irregular rate, or stop the action altogether."

"Now, that you have described the causes and effects, can you prescribe a cure."

"I cannot, so long as the dust is there, I can point out several precautions. The first would be, decidedly, to wear a mask over the mouth and nose to stop the flakes. Wire gauze would answer well, or common buckram. The working men ought really to meet and resolve upon it. The next best thing is to shut the lips and breathe through the nose only. Before taking meals, and after leaving work, gargle the mouth and throat with vinegar and water; use baths frequently, because what was lost by respiration may be regained by water; the skin with its pores being a breathing machine as well as the lungs. Take as much exercise in the open air on Sundays and Saturdays as may be possible; use a little opening medicine occasionally, say salts and cream of tartar, as there is always a tendency to inflammation, if the bowels remain long costive; above all, ventilate the workshop as much as the master or the nature of the work will permit. Finally, all I can suggest and advise is useless to thousands of our fellow creatures, who must toil and die under the unrelenting

and merciless scourge of civilised industry. With your class, it may be emphatically said, justly recorded, and long remembered, that the *dust* of the mill and the *dust* of the grave, the poor man's last and best friend, are twin brothers in corruption, whose connecting links are toil, starvation, disease, agony, and death. Would to God it were otherwise."

"Amen."

JOKES FOR INVALIDS.

QUACKERY.

Sir Robert Peel who has been a long time afflicted with an *income*, which materially threatened the constitution, and which the Russel-salve could not eradicate, was prevailed upon to try Dr. Gandison's *Charity* Pills, which have effectually cured him of the nervous shaking which the Maynooth Grant gave rise to.

Holloway says that having cured the Thames Tunnel of Dropsy, and Westminster-bridge of an old standing attack of *Piles*, he is fully prepared to eradicate the scab or scorbutic eruption with which the potatoes have been afflicted. He announces that in his treatment of the disease, the *root* of which he is so well acquainted with, must not be *peeled*, but *pilled*; and he furthermore condemns all kinds of *pots*, save one of his own ointment. He will have one advantage this time; he will have to physic his patient *out* instead of *into* the ground.

PERNICIOUS EFFECT OF NIGHT AIR.

"Exposure," says Dr. Philip, "to the night air appears to be more pernicious than can easily be explained. I am inclined to ascribe its effects to the damp, which prevails in the early part of the night from the condensation of the watery vapour raised during the day, being applied to the skin, at a time when, from the state just mentioned, its function is most apt to fail. In sultry climates, where the evening dews are heavy, the effects of the night air are often fatal, even to those in health. It is well known, both in the East and West Indies, that people are often attacked with agues, from passing a single night abroad in the woods, where the vapour is most confined." Of the baneful effects of the night air at Batavia, Dr. Lind relates a striking proof in his account of the fevers of India:—"During the sickly season, a boat belonging to the Medway man-of-war, which attended on shore every night to bring fresh provisions, was three times successively manned, not one of her crews having survived that service."

STATISTICS OF MORTALITY.

COUNTIES OF DERBY, LEICESTER, NORTHAMPTON, NOTTINGHAM, RUTLAND, AND PART OF LINCOLN.

AREA 3,936,980.

Popul.	Agricul.	Manufac.	Others.	Total families.
1,045,133	81,123	94,509	46,142	221,774

DEATHS

Under 5 yrs.		13 to 21		50 to 60		70 to 80		above 90 to 104		
M.	F.	M.	F.	M.	F.	M.	F.		M.	F.
2,880	2,199	55	61	75	79	102	122	„	93	100
666	702	62	91	52	69	75	90	„		93
360	354	64	87	62	67	127	125			——
249	247	53	113	62	56	136	106			193
170	155	77	85	50	72	118	111			
135	115	82	109	97	69	124	115	Unknown		26
——	——	90	105	70	79	96	115			
4,460	3,772	86	95	62	67	118	119	Total	21,865	
3,772		78	89	49	73	96	119			
——		——	——	69	51	70	83			
8,232		647	835	98	121	103	115			
			647	——	——	——	——			
			——	746	793	1,165	1,220			
			1,482		746		1,165			
			——	——	——	——	——			
					1,539		2,385			

LANCASTER, EXCEPT LIVERPOOL AND MANCHESTER.

AREA 1,131,270.

Popul.	Agricul.	Manufac.	Others.	Total families.
905,501	21,498	119,690	30,375	171,563

DEATHS

Under 5 yrs.		13 to 21		50 to 60		70 to 80		above 90 to 101	
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
3,453	2,740	64	77	86	67	80	80	44	25
1,233	1,096	76	88	63	56	61	62	25	
496	432	76	93	84	63	76	68	—	
283	304	75	99	58	64	82	64	69	
226	199	90	115	69	66	79	70		
129	138	101	109	78	75	78	76	Unknown	24
——	——	113	109	72	64	58	58		
5,820	4,949	112	103	65	60	75	77	Total	22,932
4,949		90	105	72	72	45	77		
——		——	——	55	61	57	58		
10,769		791	898	107	89	72	54		
			791	——	——	——	——		
			——	809	747	753	744		
			1,689	747		744			
				——		——			
				1,556		1,497			

CURIOUS DISEASE.

In the Academy of Science, Paris, last week, M. Guyon, Surgeon-in-Chief of the Army of Africa, has forwarded documents concerning an endemic disease in the tropical regions, and particularly in the meridianal points of America and Africa, the existence of which he first announced in Algiers, through communications forwarded to the Academy in 1840 and '42. The malady is known at Brazil under the name of *Maculo*. The principal phenomenon consists in the expulsion of a portion of the mucous membrane of the great intestine. It is round, of a tubular form, and of considerable length. The disease is a species of *enteritis*, terminating in mortification of a greater or less portion of the mucous membrane of the great intestine, which becomes in consequence detached, and is expelled.

Singular Coincidence.—It is reported that the Sugar-cane has been attacked with a disease similar to the Potatoe disease in Europe, and has consequently excited very lively apprehensions as to the result. There must be some atmospheric cause for this universal vegetable disease, and the same cause seems to be at work in the tropical as well as the temperate regions of the globe. Can it be the forerunner of some plague? Because it is well known that maladies are as much to be dreaded from diseased or unhealthy food as from meteorological causes. Has the Cholera in India any connexion with it? May we expect it next year in this country? No man can answer.

ADVENTURE OF A LONDON DRUGGIST.

A London druggist, being in a country town, in the course of his summer ride, to ask the commands and take the money of his very good friends the apothecaries, in pure simplicity of heart invited each of them to sup with him at a tavern the same night. All promised; all came; but one by one. When the second came in, the first, without saying a word, took up his hat and went away. Enter No. 3, exit No. 2; and so on to the very last of eight or ten of them. Of course, No. 10 and the druggist had supper enough! Next morning, the druggist, meeting one of the deserters, expressed his concern at having lost the pleasure of his company the evening before. "What the devil, sir, do you think I would sit in company with such a scoundrel as ——?" and he got the same answer in substance from every one of them.

ANTISEPTIC PROPERTIES OF GASTRIC JUICE.

The *arteries* which are dispersed in thousands on the inside of the stomach secrete from the blood a peculiar fluid or juice, called *gastric*. This juice digests the food taken into the stomach. This juice is highly antiseptic. Dr. Mason Good says, "At whatever be the degree of putridity of the food we swallow, in a short time after

its being taken into the stomach, it is sweetened by the gastric juice. Crows, vultures, hyenas, are well known to fatten on tainted meat. The gastric juice has been employed as an antiseptic out of the body. Spallanzani ascertained by experiment that the gastric juice of crows and dogs will preserve meat from decomposition an immense time. Physicians have availed themselves of this corrective quality of the juice of various animals, internally, in cases of indigestion and debilitated stomach, and externally to check mortifications and as a stimulus to ulcers.

TO CORRESPONDENTS.

J. P. L.—Liq. Potassæ, Gtt. X Mucilaginis one drachm, tincture of Cantharid Gtt. iij., m. f. haustus. Take the above twice a week at bedtime, and remember the former instructions, but if you despond you may throw all physic to the dogs. We have known people who would die, yea or nay, and die they did; although no post mortem examination could detect any structural disease.

Hope, Peckham, Surrey.—The case is plain enough, and as he desires to know what can be done, we have only to reply that he can be cured if he likes. State *cause*, *symptoms*, and *remedies*, applied hitherto.

T. D. W., Subscriber and recommender, Birmingham.—We thank him for his high opinion, and feel proud that he has derived instruction from our pages. Glad to hear he is not used to doctors, and hope he may be less so than ever. We shall try and make it so—the first thing in the morning should be a jug of water over the head; the next thing should be a wine glassful of infusion of bark at noon. Take at bedtime, twice a week for three weeks, the following—Pil hydrarg. gr. ii. extr. colocynth, gr. iij., avoid smoking, drinking, and irregular hours, and you will soon be well. There is nothing wrong in the diet.

Agnus, Leith, considers that the benefit societies would be savers to a considerable amount by following the instructions of the Family Doctor, the causes once known, certainly effects might be shunned. His sister's case—she cannot do better than take two of Anderson's pills every second night, every Chemist has them; the swelling proceeds from the cause stated. Let her also drink occasionally some good old port wine, the sore can soon be cured if the system is set to rights. Let us hear about the case, and we will answer for curing the patient.

H. E. H.—If the inflammation of the eyelids are of an old standing, or chronic kind, lotions, leeches, or washes, would be of little service. The best thing to do is, to melt down a small portion of Golden Ointment, and apply with a feather to the rim of the eyelid, just at the root of the eyelashes. Salts and cream of tartar, or a dose of calomel and jalap, will form the best prescription in the shape of opening medicine. To remove a film from the eye any druggist can supply you with a portion of a powdered shell, or rather bone of a fish, which should be blown into the eye through a quill, and then washed out with warm water.

A. O. D.—Heartburn proceeds from indigestion, excessive drinking which first tends to it by weakening the stomach, &c. A tin-plate-worker we should consider very liable to indigestion. Try the following—Gregory's mixture, a tablespoonful thrice a day in water or milk. If he would prefer pills he can have them forwarded.

U. H. C.—Ask for *capillaire*, or gather the plant yourself; you have botanists who can show it to you, at least, I have heard of many in your neighbourhood.

J. R., Salford.—Must not have seen the *last number*, or he would have seen Ringworm staring in his face on the third page of the Doctor, No. 19.

H. H., Hugle.—We strongly advise him to take two grains of blue pill, and four of colocynth, made into a pill, thrice in one week, then stop,. Procure a warm bath, and pour into it about half an ounce of muriatic acid. Take the bath twice a week for three weeks; rub the body with the hand all over, under water. When you give up the bath, either sponge the body with vinegar and water every morning on getting out of bed, or get a hair brush and rub, or be rubbed well, for fifteen minutes. He may tell us the result, for our own satisfaction, but we are pretty sure of it.

E. M'Donald.—To first question,—Most decidedly; upon every principle of anatomy and physiology, there can be no doubt of the capacity. It is notoriously known to be so, even after partial amputation. To question second,—In regard to efficacy, no doubt whatever; supposing circumstances to be as stated. In regard to the sensation, in either case it altogether depends on circumstances, the latter is more likely, however, in many cases to destroy the sensation, but not the power. The former, in most cases, will give both: there is no rule whatever. Beck's work on "Medical Jurisprudence," is a good reference, but we can prove the above by physiological facts.

J. C. A.—Will see we have kept our promise with him. We insert his letter and let the industrious thus speak for themselves. Our question and cause is not one of faction, but philosophy; not one of meddling, but of medicine. We heartily concur with J. C. A. in his wish, and shall study the best means of doing away with the dust on philosophical grounds.

"Leeds, October 13th, 1845.

"Sir,—In your answer to my last, you recommend the wearing of a mask; a thing which I did wear for more than a twelvemonth up to last winter, when I was so bad in my chest, that it was with great difficulty that I could breathe without it; that being the case with me, I gave up wearing the mask; the reason why I was so much worse the beginning of this year was, the long continued foggy weather; we had several weeks of it: several of my fellow workmen, who never cried out before, did so then. Both the young and middle-aged were seriously afflicted in the chest, and have continued to complain occasionally how the dust affects them, and the ravages are plain to be seen in the sunken eye, the sallow complexion, and the deep heaving of the chest; and the young women, if you ask them the question, will tell you that they feel quite affected by the dust and bad atmosphere; some by cough and spitting, others by sick head-ache, others by loss of appetite; then, again, in the spinning rooms, where they are troubled by the steam, the rooms sometimes being so full that they can scarce see each other; then coming out of the warm rooms, on a cold evening, we go quite chill, and this often brings on illness. Sir, if any thing could be done to keep the rooms clear from dust and steam, it would, indeed, be a blessing to thousands of human beings who are compelled to be confined in them. Sir, a reduction in the time of working, would give unaccountable relief to all employed in factorys. We are now working thus per day,—begin at a quarter to six, work till eight, stops half an hour, then works while twelve, then stops three-quarters of an hour, then works while four, stops quarter of an hour, then works while seven. Oh! for a ten hours bill!

"Your humble servant,—J. C. A."

To Correspondents.—We shall consider it a favour if all letters, requiring answers on the Saturday, should be forwarded so as to reach us on Tuesday. We will not answer for their insertion, if they reach us on Wednesday. The correspondence is now in the Printer's hands, and yet we cannot retard the printing and publication, to reply to several letters just arrived.

To the News Agents and Readers.—Many of the numbers of the Family Doctor being out of print, and not to be had except in the parts we have resolved to bring the first volume to a close with our 26th number; after which we shall begin a new series. Previous to that time we shall have re-printed the numbers wanting, and any one can have sets complete, or the 1st volume complete with our 26th number. The new series will be still further improved, and rendered worthy the unexpected encouragement we have received. The printer had better be informed of the number of copies required by the agents.

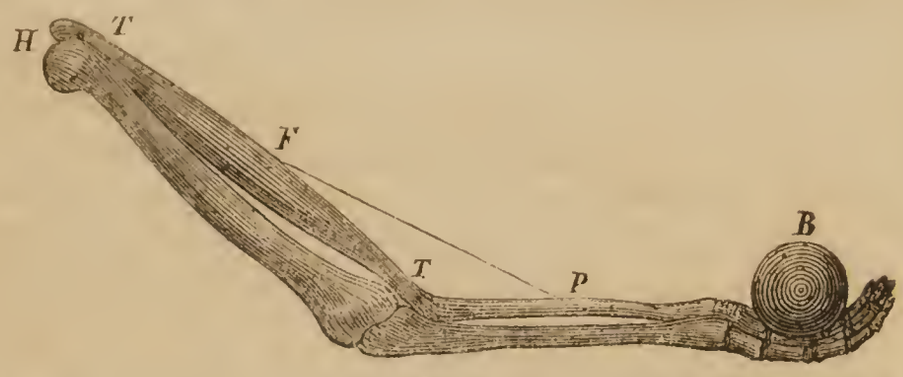
N.B. Medical Advice will always be given to any person (gratuitously) through the pages of the Family Doctor; but it is necessary to give age, sex, employment, symptoms of disease, length of its duration, together with the most probable cause, or at least to describe the commencement of the attack. Any one may have advice through the above medium—viz., *answers to correspondents*, without the necessity of giving their names, or the possibility of their being made known; only, there may be questions which we shall decline answering in our pages, in which cases the patient may correspond with the editor, receiving advice until cured, on payment of 2s. 6d., as a fee, in the outset. In all cases direct to the Editor of the Family Doctor, 4, York Cottages, St. Mark's-road, Camberwell New-road, London.

THE

FAMILY DOCTOR.

ILLUSTRATED.

No. 21.] OCTOBER 25, 1845. [PRICE 1½*d.*



ANATOMY.

THE MUSCULAR SYSTEM.

THE above design is the best we could procure for the illustration of the contraction of the muscles. The drawing represents the *humerus*, or bone of the arm; the *radius* and *ulna*, bones of the fore arm; the bones of the hand and fingers, and a single muscle attached above to H, the head of the humerus or ball of the shoulder joint, and below to the elbow joint, and bones of the fore arm. The form of the muscle itself will strike the observer. It swells out at F its fleshy part, and diminishes gradually at each extremity to T T, the tendonous parts. The action of the muscle is as follows:—the fleshy part contracts in the centre and swells considerably. The upper part being attached to the *humerus*, affords it a purchase, which necessarily pulls the lower extremity towards it; but that being attached to the fore arm, and it being moveable, the arm is bent at the elbow joint, and the hand raises B, the ball, upwards towards the shoulder. It will thus be seen that a muscle acts by shortening its fibres towards the centre, and works from a fixed origin in one bone, against its insertion in another, which is not fixed, but which yields to its influence, and gives rise to all the varied movements of the human body. We shall pause in our illustration, to remark upon the wonderful mechanism and arrangements of nature, in this very instance. The bones represented in the design, it will be observed, are enlarged at their extremities, particularly the *humerus* at H, to form the ball of the shoulder joint, and likewise at the elbow joint. The object is double the formation of a ball and socket joint, as well as a hinge joint, and also to present a surface for the attachment of the tendons of the muscles. At each extremity, these ridges, notches, and

rough points afford a secure hold for those shining ends called tendons, and which may be so remarkably felt under the thigh, at the knee joint. Had there been no such tendons, and had all the muscles been fleshy, how unsightly the joints and limbs would have been. Where the swelling calf or rounded ankle? Where even the sinewy strength of arm or limb? Thus symmetry, beauty, and utility are admirably combined, through the wonderful foresight of nature. It must not be supposed that all muscles are attached to bones, because the muscle surrounding the

mouth, and by the action of which it varies its form and dimensions, has no bony attachment, nevertheless it must be aided by the muscles of the cheek which have. To exhibit, still more clearly, the admirable design of nature, let us suppose the muscle, instead of ending at the elbow joint, was extended to point P, it would undoubtedly have a greater purchase, and working at right angles, every mechanic knows that it would raise a greater weight. But what it might thus gain in power it would lose in celerity of action, because it would require infinitely longer time to contract if inserted at P to raise the arm towards H than it does now when inserted where nature put it. The dotted line will make this self-evident. The angle gained by nature, although at a mechanical disadvantage, affords the arm a much larger sweep, and, consequently gives it greater utility than if it worked from P. Many clumsy men are very strong men, but never active ones. Many animals destitute of all symmetrical lines of beauty such as the elephant, are also amazingly strong, but strength is purchased at the expense of beauty and agility, and that was a sacrifice nature would not make in the instance of the lords of the creation ; she had too much wherewith to endow man to admit of that. She had designed too many duties for him. She made him to subdue and rule her creation, and therefore she formed him so as to combine intelligence, activity, and strength, in one and the same frame. How glorious her design ! How admirable and instructive the study of that design.

The muscles are in all animals red, when health and exercise are maintained, for if the latter be omitted, or the former absent, their colour not only becomes paler, but their volume a size less. Thus whilst nature provides muscular power adequate for the performance of every motion, she also strengthens and adds to the muscular power when it is required. Compare a clerk's arm with a black-

smith's, or, a coachman's leg with a pedestrian's, and it will become obvious that where size and power are not wanted she abstracts it; and where they are required she gives both. Let us again consider the uses of muscular exercise. By contraction of the abdominal muscles digestion is accelerated. So is respiration carried on, and above all the circulation of the blood facilitated, the health improved, and the system preserved in strength and vigour. Every rule then that applies to muscular exercise if neglected, must tell against the health of various of our artizans confined in mills and workshops. From too much exercise the mind and body may become both materially prostrated for a time; but the chief danger our artizans have to encounter is that of having too little exercise. When that is combined with an unwholesome atmosphere and food, as well as close application to their pursuits, we can then easily account for decline of health, deformity, imbecility, and all other ills that cling to overwork. Nature provides muscular power for all. She intends it to be used, for she combines muscular activity with the preservation of health. She makes it a law that the weaker muscle by proper exercise, may become strong. She makes it a law that muscles must not remain long contracted or on the bend, as in holding out a weight in the hand, nor long relaxed, as in sitting on a stool, at a desk, or on a bench in a workshop. She insists on exercise and the observance of her laws, otherwise she inflicts a penalty. How is that to be avoided? and what must be done to preserve health? We shall tell that in our next.

PRACTICE OF MEDICINE.

MEASLES.

This is a very common, but frequently rather a troublesome than a dangerous disease, although there are cases in which the symptoms assume a malignant character, and terminate in death. The complaint is infectious. When measles are approaching, there are generally a great heat of skin, cold and hot flushes, sickness, loss of appetite, listlessness and prostration of strength, drowsiness, and a short cough. The eyes and throat are at times much affected. The fever will continue, varying in intensity, and be attended with vomiting or purging of a greenish matter, until about the fourth day, when the face will be covered with spots like flea-bites. These spots extend also to the breast, and then rapidly to the extremities. There may here be some confusion and mistakes made between measles and small-pox; but a little attention to the appearance of the eruption will soon decide the matter. In small-pox, pustules rise distinctly above the skin and contain matter. In chicken-pox, the pustules contain serum. Now in measles the eruption scarcely rises above the surface at all. There is another distinction, but not so much to be relied

upon, viz., that the fever, difficulty of breathing, and general constitutional disturbance commonly cease in small-pox, whilst they are, on the other hand, not at all diminished in measles.

These distressing symptoms often continue until the very termination of the attack. Measles have run their course, and begin to decline about the sixth day; on the ninth they generally disappear, and when the patient has been much distressed this is a very fatal period, because, when the eruption retires from the skin, there is great danger lest it settle upon the lungs, and produce inflammation. We will point out the favourable and unfavourable symptoms of measles.

When the skin is not too hot or dry, but moist, and when the lungs are free, at least acting as freely as can be expected; when the brain is not too much compressed, or the eye too sensitive of light; when the bowels are loose, of their own accord, and the urine is passed freely, the case may be considered safe, unless some very great mismanagement exist. On the other hand, no parent should for a moment hesitate in sending for the best advice at once, provided the following symptoms make their appearance. If the eruption suddenly retires, and the brain is affected, which it is sure to be; or should great restlessness exist, or purple spots intermingle with the measles, there is danger, and it ought to be met boldly and averted at once.

Treatment.—The chief object we have in view in measles, is to bring the eruption out, to keep it from suddenly retiring inwardly with a re-action on the brain or lungs, and, whilst watching its progress, to counteract too much inflammatory action on the skin, which would be as fatal as the others.—There can be no doubt as to the propriety of a warm bath in the commencement of the attack. The condition of the bowels must then be looked to, and if costive, a dose of calomel and rhubarb should at once be administered according to the age of the patient, which any chemist can give when once informed. The little patient should be put to bed in a cool, airy room, and not smothered in blankets. His drink should be barley water, or black currant, or tamarind tea. The food need not be mentioned, as they are generally and very properly averse to food. Gruel is best suited to them. The next thing to attend to is, the throat and lungs. Honey and vinegar may be employed with advantage, or what is better, alum water, and a small quantity of sulphuric acid; say one ounce of alum, half a drachm of sulphuric acid, to a quart of water. The latter indeed is indispensable to prevent any of these purple marks. Another admirable thing is infusion of peruvian bark, a tablespoonful every three hours—should the fever run to a great height; bleeding is sometimes necessary, but that must depend upon the oppression of the lungs or brain. To allay restlessness, syrup of poppies may be administered, although great caution must be used with opiates, and the state of the lungs taken into consideration. Finally, there are other remedies to be applied, but the reader must perceive that with such tender subjects, the presence of a medical

man is necessary, to watch the progress of the disease, and sway the scale to that of returning life and health. The food, on recovery, should be light and easily digested. Airings should be attempted as soon as the patient can bear it, and when getting fairly round, there is nothing calculated to restore the vigour and nerve the frame so much as bathing in cold water, gradually accustoming children to the cold, by making the water less and less lukewarm every morning.

CHEMISTRY.

That the air has a positive weight or gravity of itself, is exemplified from the following considerations:—It always accompanies the earth in its revolutions round the sun, which proves that it is connected with the earth by the general force of gravity. It is by this power that it holds in suspension clouds and vapours, that birds fly, and substances rise in the air, such as balloons, for miles in height, thereby evincing the truth of its weight, in the same manner as ships, and other floating bodies prove the weight of the water which supports them. As the water must naturally be heavier than the wood which floats upon its surface, so the air must be heavier than the smoke and vapour, which raise themselves and become suspended in it. But a more absolute proof is having a flask accurately weighed—if it is a quart bottle and the air is extracted from it, it will be found to be fifteen or sixteen grains lighter, when deprived of air. It is thus known that a cubical foot of air weighs about an ounce and a quarter.—Having established the gravity of the air, we will speak more particularly of its pressure:—The pressure of the atmosphere was first noticed by Galielio in the seventeenth century. He found that it was impossible to raise a column of water higher than 34 feet, or the same of mercury, higher than 30 inches, that is a column of mercury one inch square and 30 inches long, has the same weight as a column of water of the same size and 34 feet long, or either of these two have the same weight as a column of air, extending from the surface of the earth to its utmost limits, the height being computed at 25 miles; consequently as the pressure of the atmosphere can only support a column of mercury 30 inches in length and 15 pounds in weight, it follows, that a corresponding column of air, must act with a pressure of 15 pounds on every square inch, and as there are 144 square inches in every square foot, the pressure upon each square foot is equal to 2160 pounds.—As the air, like other fluids, presses in every direction, and as the surface of the body of a middle sized man is computed as 14 feet; he must sustain at every instant of time a pressure equal to about 27 cwt.—This pressure which may seem inconceivable to common minds is supported by its equality of pressure on every part;—and by the

elastic force of the internal part of the body. That this belief may be entertained, the pressure of the air may be clearly demonstrated. Take a glass tube and exhaust the air. A person placing his hand on the open end will feel the pressure; if instead of the hand a piece of moistened bladder is tied on, he will observe the bladder bending in, and at last it will crack with the report of a pistol. But a still easier proof is open to, and easily understood by, every person, by pressing down the two sides of a pair of bellows, until all the air is expelled when it will require a force equal to some hundred pounds to force them open, or it may be commonly observed in our streets amongst the children, by pressing a piece of leather soaked in water, so as to make it air-tight, upon a stone until the air is expelled, when the pressure of the atmosphere will retain it on the stone until a moderate weight may be raised. It is peculiarly observable in our common pumps, by which we can raise water from a depth, and to a height of 34 feet, but no higher, unless we use the forcing pump. There are three kinds of pumps, called by workmen the sucking, lifting, and forcing pumps: by the last two water may be raised to an indefinite height with a proper apparatus and requisite power. But by the sucking pump, as it is called, water can only be raised to a height of about 34 feet. It consists of a pipe open at both ends, in which, is a moveable cylinder or piston, worked by means of a handle. The piston is made by leather air-tight in the cylinder. There is a valve opening upwards to allow the water to ascend, but nothing to descend. There are generally two barrels having a valve at their junction for the same purpose as the other. The piston descends, the air ascends through the valve which closes, and on a second stroke of the piston, the water yielding to the atmospherical pressure on its surface, must rise through the tube to the spout. This is called in the country the sucking pump, and, it is a common custom during warm weather, and when the water is scarce, to pour water down a pump, called fetching the water, under the ridiculous supposition that one part of the fluid is sent down for the purpose of bringing another part up. It acts simply by swelling the leather in the valves, thereby making them air-tight which the warm weather had cracked. Yet the pressure of the air, by the ingenuity of man, is made the forerunner of good and bad weather, through the medium of the weather glasses. When it was observed that a column varied in height, and consequently that the pressure of the atmosphere was changeable, instruments were formed to indicate a corresponding change in the weather, which are, when divested of their outward trappings, simply tubes of glass 33 or 34 inches in length, from which the air has been expelled, and filled with mercury, then inverted in cups of the same substance, and to which is attached a scale to note the rising and falling of the mercury in the tube. So that when any storm is about to occur in the weather, there are streams of air in the higher regions rushing in that direction, thereby diminishing the pressure of the atmosphere: this re-

lieving the mercury in the cup of part of its previous weight, causes it to fall in the tube in proportion to the greatness of the change about to occur. Thus we may expect fair and calm weather when the mercury is high, and generally wet and stormy when low. The pressure of the atmosphere varies at different altitudes above the surface of the earth. As all the particles of air press upon each other. Those parts nearest the surface of the earth must bear the greatest weight, in the same manner as if we were to pile a number of people above one another, the unfortunate person at the surface of the earth must bear all the super-incumbent weight, or, if we look at a hay stack, we will find the bundles of hay at the top more easily removed than those at the bottom, and the farther we descend we shall find it to be sqeezed into less bulk. In the same manner the higher we rise in the air the more the rarity is increased. In the same proportion its pressure diminishes. The exact height to which the atmosphere extends has not yet been precisely ascertained, but it is known to refract the rays of the sun at a height of only 45 miles; therefore 7 miles above the earth, the air must be 4 times lighter than at the surface, at 14, 16 times at 21, 64 times, and so on until at the height of 49 miles, when it will be 16 to 384 times more rarified than at the surface of the earth: at the surface of the earth a quart of air weighs but 15 grains, so at an altitude of 49 miles it can only weigh the 1000th part of a grain.

CLOTHING.

BY DR. FLETCHER.

In a climate so variable as ours, the use of clothing as a protection against the effects of sudden changes in the weather, and of the cold and moisture of the atmosphere, which so frequently prevail, is a matter demanding the strictest attention from all who have regard to the preservation of their health. There is another point connected with this branch of regimen, which is of little less importance. Amongst every people, who have emerged from the lowest state of barbarism, dress has been considered as a matter of ornament, as well as utility. Caprice and false taste have, in many instances, led to the adoption of fashions calculated to interfere with the proper growth and action of different organs of the body. The use and abuse of dress will form the subject of the present chapter.

Most of my readers will be aware, that it is not from warmth contained in the clothing, but by its preventing the too rapid escape of heat produced in our bodies, that it protects us from the effects of a cold atmosphere. This heat, which is called animal heat, is given out during the chemical combinations which take place in the change the blood undergoes in the lungs, and in the processes by

which the secretions, and the different structures of the body, are formed from the blood. But the amount of heat thus given out, is regulated by that vital power with which the nerves are endowed, so as to maintain the proper standard, whether the heat of the atmosphere be below or above that of the body. The heat of the surface varies with circumstances, but in the internal parts it is uniform.

When from the extreme coldness of the atmosphere, or from the want of sufficient clothing, the heat escapes from the body much more rapidly than it can be produced, not only is a depressing effect produced by the sensation of cold, but the circulation of the blood on the surface of the body, and in the extremities, being decreased, it accumulates in the internal organs; the circulation becomes sluggish, the brain and other vital organs are loaded with insufficiently oxygenated blood, their functions are, therefore, as has been before explained, imperfectly performed, and a disinclination to exertion is the consequence, which is succeeded by an irresistible propensity to sleep, which, if given way to, ends in death.

But when the degree of cold is not sufficient to produce fatal effects, the consequence of frequent and long continued exposure, is to reduce the animal powers to a low ebb; and as the capability of producing animal heat is thereby diminished, the mischief is continually increasing. A bad and deficient diet, by decreasing the vigour of the system, renders individuals less capable of sustaining the effects of a cold air, and, as has before been explained, confinement to a close and heated atmosphere increases the evil. We ought, therefore, to trust to good clothing and good food, as the best means of resisting the effects of inclement weather.

The proper materials for clothing is the first point for consideration. In this respect much mischief is incurred by all classes, from the general disposition to sacrifice comfort to appearance; though it is gratifying, that more sound sense is shewn at present, in this respect, than was the case a few years ago, when the extreme lightness of the clothing, especially of females, was, to a lamentable extent, the source of consumptive and other lingering complaints, as well as of the more acute forms of disease.

In a climate like ours woollen fabrics are indispensable articles of dress. Silk is to be preferred to cotton or linen. Those cloths on which the nap or pile is left, retain the heat better than those from which it has been removed. Thus, blankets are a much warmer covering than heavier cloths, of a close and smooth texture. The reason for this is, that a sheet of air, which is a very bad conductor of heat, is retained in the pile. It is on this account that furs are so effectual in retaining heat. Cloths of this kind of open and shaggy texture, are now much used for topcoats, and it is a fashion which ought to be continued. The looser the garments are made, the warmer they are, in consequence of their keeping a volume of air confined. Cloaks are, on this account, preferable to great coats; and the latter

ought always to be made loose and easy: they thus keep the body warm, and do not shackle and embarrass the motion of the limbs. There is a fabric now in very common use for outer garments, which, from the name of the inventor, are called Mackintoshes. It is manufactured by cementing together two layers of thin cloth, with a solution of Indian rubber, which is completely waterproof, and forms an excellent protection against rain, or the effects of a damp atmosphere; but ought by all means, to be worn wide and loose. If this fabric be used for close garments it confines the perspiration so completely, that I have seen the under clothing perfectly soaked, when, on the parts of the body which were only covered with ordinary clothing, the perspiration was scarcely perceptible.

Flannels ought to be worn next to the skin by every one in this variable climate. In cold weather their utility is too obvious to need explanation. In hot weather they absorb the perspiration, and prevent the sudden chill which is so frequently caused by the comparative coldness, and the dampness of the evening air, from which the light clothing, generally worn in warm seasons, is not calculated to protect the wearer. Flannel is of great use, too, from the friction it produces on the skin, by which a healthy action of the nerves and vessels is excited.

I have heard it remarked by travellers, that in no country is so little care taken to adapt the dress to the changes of the seasons, as in ours. There is none in which it is more required, but certainly greater attention is paid to this point now, than some years ago. Even in summer the changes of the weather are often so sudden, and unlooked for, that it is not advisable to use light cotton fabrics for the outer clothing of men; and when females use them, a sufficiency of flannel garments ought to be worn under them. In winter the dresses of women ought to be of woollen or silk. Both sexes ought to be careful, on leaving a warm room, to put on additional clothing. I have before referred to the danger of suddenly passing from one extreme of temperature to another. This should be guarded against, both in the way just mentioned, and by acquiring the habit, which well fed and well clothed persons easily may, of bearing a low temperature in their rooms, without inconvenience or discomfort.

Those who are employed in heated rooms should be especially careful to put on additional coverings before they go out, in cold or damp weather, or in the evening, at any season. This is particularly necessary in the case of factory workers, whose animal powers are in so many ways enfeebled; and there is no class of people who are so careless in this respect. A shawl thrown over the head is the only addition to the clothes the women and the girls wear in the mills, and the men generally put on no additional garment. Cloaks and great coats are indispensable, and would be a means of preventing many of the deseases to which this class of operatives are so liable, and by which the average duration of their lives is rendered

so much shorter than that of the classes who are placed in more favourable circumstances. These articles of dress are by most of them reserved for display on holidays, and the money which would procure good every-day clothing, is often spent in different kinds of finery to be worn on those occasions. I have spent much time, and made some sacrifices, in the endeavour to obtain justice for this ill-treated class of my countrymen and countrywomen. I wish it might give me influence enough to induce them, as far as possible, to protect themselves by applying their small earnings to the purchase of those comforts, which would, in some degree, counteract the injurious effects of their labour; instead of indulging themselves in articles of vanity and luxury, which, trifling as they are, have been held out by those who have an interest in the system, as proofs of the advantages of their condition.

(To be continued.)

STATISTICS OF MORTALITY.

WALES, MONMOUTH, AND HEREFORD.

Popul.	Agricul.	Manufac.	Others.	Total families.
1,016,219	91,567	59,825	58,853	209,745

DEATHS

Under 5 yrs.		13 to 21		50 to 60		70 to 80		above 90 to 107		
M.	F.	M.	F.	M.	F.	M.	F.		M.	F.
2,161	1,674	64	71	73	70	125	89	,,	140	223
816	783	64	77	47	54	69	69	,,		140
556	513	57	60	56	54	105	103			———
394	376	89	77	56	43	101	82			363
296	301	77	73	51	41	81	88			
187	193	100	96	63	77	104	115	Unknown		52
———	———	84	84	73	60	92	86			
4,410	3,840	105	72	62	58	89	93	Total		21,573
3,840		118	105	81	48	117	114			
———		———		62	48	75	77			
8,250		758	715	111	99	109	126			
		715		———		———				
		———		735	652	1,067	1,042			
		1,473			735	1,042				
		———		———		———				
				1,387		2,109				

N.B. Causes of death formerly given.

REGIMEN unquestionably has cured more diseases than all other remedies put together. A celebrated physician inquiring of Father Bordalove what regimen he followed, the Father replied, "I make but one meal a day." "Keep your secret," said the Doctor; "if you publish your plan, you will utterly ruin the practice of medicine."

ANECDOTES.

SINGULAR CURE OF THE QUINSEY.

Dr. Radcliffe was remarkable for his expediency in all extraordinary cases: he was once sent for into the country to a gentleman who was dangerously ill of a quinsey; and perceiving that no application, external or internal, would be of any service, he desired the lady of the house to order the cook to make a large hasty-pudding; and when it was done to let his own servants bring it up. While the cook was getting the pudding ready, he took his men aside and instructed them what to do. In a short time up came the pudding piping hot in the greatest imaginable order; and was set upon the table in full view of the patient;—"Come, John and Dick," said the doctor, "you love hasty-pudding, eat this as quick as possible, for I believe you both came out this morning without your breakfasts." Both then commenced operations with their spoons; but John's dipping twice for Dick's once, Dick took occasion to quarrel with him, and dabbed a spoonful of the hot hasty-pudding slap bang in his face. This John immediately resented by returning the compliment in nearly a double dose, which almost blinded Dick, and so exasperated him that he took the pudding by handsful and pelted his fellow-servant, who battled him again in the same manner; and so copiously were they bestudded that they each appeared moving puddings of nastiness rather than hasty-puddings. The patient, who had been an eye-witness to this hasty rencontre between Radcliffe's men, could not refrain from the most hearty burst of laughter; so much, in fine, was his fancy tickled that the quinsey burst and discharged its contents. Radcliffe completed the cure, and both the servants were amply rewarded after the joke had had its effect.

CHOLERA.

A GENTLEMAN, recently returned from Paris, informs us that it was most amusing to study the French character when cholera made its first alarming onset in the metropolis. The cafes were crowded with persons, of all descriptions, calling for "punch a Magendie;" nothing else was drunk, and many a severe griping belly-ache was the consequence; but, in addition to this punch, every one took to cigar-smoking, and you might see in the streets, as you passed along, those who had not served their noviciate to the practice laying hold of any rails or balustrade, and retching and vomiting after every whiff; yet they most nobly persevered, for nothing was so effectual a preservative as smoking, they were told. If any looseness came on, it was often no easy thing to ascertain, whether one of these "jeunes hommes de tabac" were really affected with cholera, or only with the effects of the smoke. So great was the demand for cigars at first, that our friend for some days could not obtain one, at a dozen or more shops where he applied.

ELIXIR OF LIFE.

An emperor of China received from an impostor an elixir of which he exhorted him to drink, promising that it would confer immortality upon him. A mandarin present, after having in vain attempted to dissuade the emperor from trusting to the promises of the empiric, seized the cup and drank off the liquor. The prince, enraged at his boldness, threatened to condemn him to instant death; to which the other with perfect tranquillity replied, "Sire, if this elixir really confers immortality, you will in vain attempt to put me to death; if it does not, can you be so unjust as to deprive me of life for so trifling a theft?" This remark calmed the rage of the emperor; and the history adds, that the effect of the elixir was to put the mandarin's life in the utmost danger.

Another emperor of China, still more attached to life than the former, and infatuated with the secrets of the philosopher's stone, persuaded himself that it was not impossible to discover an elixir that would render him immortal. This notion he communicated to his physician. The latter tried various plans to escape from the unreasonable caprice of the emperor: at length he hit upon a successful expedient. He told him that the simples, requisite to compose this precious elixir grew in some neighbouring islands, but that they must absolutely be culled by pure and innocent hands, without which they would possess no virtue. He added, that it was necessary to send thither three hundred youths and maidens of unsullied manners and of tender age, yet sufficiently robust to sustain the fatigues of the journey. The emperor approved of the project, and committed to the physician the conduct of the expedition. They arrived happily at Japan, where, instead of amusing themselves with the vain project of gathering plants, they occupied themselves with peopling an island, which was called Nipon.

PHARMACY.

EMBROCATIONS.

Embrocation for Lumbago.—Oil of turpentine rubbed on the loins, and taken inwardly, twenty to thirty drops, in peppermint water, three times a day.

Compound Embrocation of Opium.—Tincture of opium, and spirit of sulphuric ether, of each two ounces, spirit of camphor two ounces: mix. In deep-seated pains in the neighbourhood of the ear this generally relieves sooner than any other application: in toothache it will often give instant ease; in sciatica it is of great benefit, and in painful affections of the muscles it sometimes acts as an immediate specific.

Embrocation for Strains and Bruises.—Acetated liquor of ammonia one pint, spirits of wine three ounces.

2. Camphor half an ounce, spirits of wine half a pint, distilled vinegar six ounces, water three ounces; dissolve the camphor in the spirits of wine, then add the vinegar and water.

3. *Soap Embrocation.*—White hard soap three ounces, spirits of wine three-fourths of a pint, spirits of hartshorn four ounces, camphor one ounce; as before.

LOTIONS, EYEWASHES, ETC.

Lotion for Chilblains.—Alum, distilled vinegar, and white vitriol, of each half an ounce, water two pints.

Lotion for Scorbutic Ulcers.—Tincture of myrrh and lime water, of each two ounces.

Black Wash.—Calomel two drachms, lime water one pint; in syphilitic ulcers, &c.

Acetated Lotion of Ammonia.—Rectified spirits of wine two ounces, acetated liquor of ammonia five ounces; in phlegmonous or local inflammation.

Eye Water.—Sugar of lead six grains, rose water six ounces.

2. White vitriol ten grains, rose water eight ounces.

3. Liquor of acetated ammonia two ounces, camphor mixture six ounces. This is a good application after ophthalmy, when the eyes are relaxed and weak.

4. *In the purulent Sore Eyes of Children.*—Blue vitriol three grains, camphor mixture five ounces.

5. *In painful Sore Eyes.*—Opium ten grains, dissolved in twelve ounces of boiling water, and strained; to which add six grains of camphor.

SOCIETY, QUACKS, AND DOCTORS.

SOCIETY, as at present constituted, rests upon an artificial foundation. The habits and customs of the people, their lengthened hours of labour, their insufficient food, their scanty dress, their comfortless houses, all have their origin in the violation of nature's laws, and in the establishment of others which pay no regard to the mental elevation and physical well-being of the people. Need we be surprised that nature imposes a penalty for the least breach of her laws? Let a finger be thrust into the flame and nature is ready to punish. Let a man eat, work, or drink more than is strictly necessary, and again the pains of indigestion, the distortion of the frame, and the gradual failing of strength, or the horrors of the drunkard overtake him.

When any act is done in opposition to the laws of nature, she is always ready to assert her right, to correct her children, and with the warning voice of suffering to bid them beware!

In civilised society, you are, in many instances prevented from profiting by a timely warning, and thereby avoiding much future misery and suffering.

To eradicate physical suffering you would require two grand remedies to be applied—the first should be through the law; the second through the administration of rational medical remedies, found in nature, and applied according to her never-erring laws.

The legal means are surely necessary when we look into your prisons, madhouses, hospitals, and poorhouses, to witness the ruin of man's godlike reason and the wreck of nature's bodily strength, health, and vigour, all of which might have been wisely employed for the good of society and the happiness of its members.

The rational medical means are also equally necessary when we see so much professional and non-professional quackery encouraged by a credulous public, and discover nature, her laws, and her remedies to be crucified between them.

Let a tribe of American Indians, now reduced in independence and supplies by the encroaching stream of civilization, be compared with a portion of our society, and see the difference in health, strength, and bodily activity.

Let domestic animals be compared in beauty, size, and health, to those in a state of nature, and we will at once discover on which side the superiority lies.

The laborious application of the working class, the sedentary habits of the middle class. and the luxurious living of the aristocracy have given rise to diseases differing in character, symptoms, and destructiveness.

It is not necessary that all men should become wild Indians to have their diseases cured, but what I contend for is, to borrow from nature and nature's children the most effectual preventative and the quickest and safest curing medicine that can be found.

Instead of doing this, we have the medical profession making a lecturer their god, *his* book their bible, and *his* remedies their faith. We have the quacks learning the names of herbs and roots, guessing at their qualities, and without knowing anything of the internal structure of the human body, or of its digestive and physical arrangements, dropping their messengers of health into the mouth as if into a dark pit, leaving it to chance to send up a cry of delight or the groan of death.

The majority of the medical men arrange diseases and remedies into classes, they seldom vary the application of their medicines to the disease which is opposite to it in the college list. They make very little use of the excellent opportunities which dissection affords them of knowing every part of the human frame. They are too conceited to learn any more, and instead of making their liberal education the stepping-stone into the field of nature, they convert their knowledge of nature and man's body into a piebald system of practice, which, for the sake of gain, will put a warm towel to the back of the customer, and a harmless bottle of stuff into his stomach.

The quacks take advantage of this state of things, and in rough surgery, such as bone-setting, they take lessons from nature, and treat *human* beings (as they call them) in the same manner as horses.

Some of them succeed in this, because they can *see into* the natural mode of cure and *look at* the process.

But when they come forward to practice medicine, being utterly ignorant of the human frame, they commence a battle with disease, like a mountebank at a country fair, fighting the air with a cudgel, and are as likely to become head breakers as body curers. They stand upon the stage of public credulity, inviting public faith to a benefit, whilst they are searching for the quack All-cure with a lantern at noonday.

A majority of medical men are guided by the rule and plumbline of the schools, the quacks by the supple guage of chance; and, between the two, at the game of kill-or-cure, the public are sure to be losers.

The artificial state of our society has given rise to the diseases alluded to, and to the various aspirants to medical fame.

(To be continued.)

CURE FOR THE STING OF A BEE.—It may not be generally known, that common whitening proves an effectual remedy against the effects of the sting of a bee or wasp. The whitening is to be moistened with cold water, and immediately applied. It may be washed off in a few minutes, when neither pain or swelling will ensue.

TO CORRESPONDENTS.

N. O. W.—It is impossible to say from what cause the specks upon the pupil of the eye have originated, and consequently to suggest a remedy without seeing the case would be pure quackery.

Magdalen.—The effect alluded to depends entirely upon the dose administered, and we left it entirely to the discretion of the patient when to use it. The following may be used safely, and with effect, if the former prescription does not suit:—R.—Ext. colocynth three-grains; pulv. opii. opt. quarter-grain; ext. conii. eighth-of-a-grain. M. f. pilula.—Dose vi.

J. P. Rambleton, Aberdeen.—Ung. hydra. three-ounces, apply once or twice.

Constant Subscriber, Coventry.—Yes, we can send him some medicine; or, if he does not like that, try some infusion of peruvian bark, two-ounces to the pint. His complaint is indigestion: as for the corns apply strong acetic acid, night and morning, and wear wide shoes. Eight stamps.

H. P., Preston.—Some people are naturally costive, and do not suffer in health on that account. The best way of removing one habit is by adopting another. Make the attempt each day, to be regular in your bowels, and nature will soon get into the habit. The best thing you can take is epsom salts, two-ounces, dissolve in one quart of hot water, add half an ounce of sweet spirits of nitre, and the same quantity of cream of tartar.—Dose a tablespoonful thrice a day when needed. He can have such a pill if he desires it. But he had better do without it if he can.

Alcove, Colne.—Procure some Anderson's pills. Take two at bed-time, thrice a week for three weeks. Procure some marsh-mallows, make a decoction, and use it as a wash and injection night and morning. If that does not succeed, procure some oak bark, dried, a handful to a quart of boiling water; cover it over in the jug, and let it stand twenty-four hours, then use as above stated. The bowels had better be opened before the wash is used. There are periods when the wash must be suspended.

Q. Rose.—There must surely be some matter forming or formed near the ankle joint. We advise fomentations and poultices, a turnip poultice is the best.

T. I. G. V., Hulme.—He does not speak of colic, otherwise we should imagine the disease produced by lead. No doubt the paint causes much of the mischief. Try the same medicine as that prescribed for *H. P., Preston.* Wash the paint off the hands night and morning.

M. B. G., Liverpool.—Gregory's mixture, one tablespoonful night and morning. Eight stamps will procure the medicine.

A. N. M. V.—Get an ounce of gum Arabic, dissolve it in half a pint of boiling water. Procure three drachms of syrup of squills, and half an ounce of syrup of buckthorn; add these to the gum water, sweeten with a tablespoonful of sugar, and squeeze into the mixture the juice of a lemon. Dose for the mother, a teaspoonful when the cough is troublesome. For the child, a teaspoonful only after these fits of coughing come on. Make the mixture yourself.

J. W., Eastwood Vale.—Such an affection is often a result of small pox. Sulphate of zinc, one scruple, laudanum, four drachms, rose water, eight ounces: mix. Wash the eyes frequently with the above lotion; wear a green shade over the eyes.

M. T.—Procure a few Columba roots, cut them into pieces, pour over them a pint of boiling water, cover over for twenty-four hours; bottle, add about half an ounce of the tincture of valerian, and the same quantity of sweet spirits of nitre. Dose, a tablespoonful thrice a day. Take exercise and amusement, if you can, and you will find yourself much better.

A Subscriber, Macclesfield.—We cured ourselves with the following, after a couple of days of something very like British cholera. Laudanum, twenty drops, prepared chalk, one scruple; beat both up in a raw egg, and swallow it. You may add sugar, if you like. Take this, morning and night; until the flux stops, which will not be very long.

X. Y., Leeds.—Something or other must have been done in opposition to nature to cause such symptoms, or she would not exhibit such an alarm. The best thing you can do, is, to sponge the body over every morning and night with cold vinegar and water: wear flannel. That will brace up the system, which you evidently require: live regular.

Private Correspondence.—One of our correspondents from Kimberley did not state his particular address although the letter has been forwarded.

To Correspondents.—We shall consider it a favour if all letters, requiring answers on the Saturday, should be forwarded so as to reach us on Tuesday. We will not answer for their insertion, if they reach us on Wednesday. The correspondence is now in the Printer's hands, and yet we cannot retard the printing and publication, to reply to several letters just arrived.

To the News Agents and Readers.—Many of the numbers of the Family Doctor being out of print, and not to be had except in the parts we have resolved to bring the first volume to a close with our 26th number; after which we shall begin a new series. Previous to that time we shall have re-printed the numbers wanting, and any one can have sets complete, or the 1st volume complete with our 26th number. The new series will be still further improved, and rendered worthy the unexpected encouragement we have received. The printer had better be informed of the number of copies required by the agents.

N.B. Medical Advice will always be given to any person (gratuitously) through the pages of the Family Doctor; but it is necessary to give age, sex, employment, symptoms of disease, length of its duration, together with the most probable cause, or at least to describe the commencement of the attack. Any one may have advice through the above medium—viz., *answers to correspondents*, without the necessity of giving their names, or the possibility of their being made known; only, there may be questions which we shall decline answering in our pages, in which cases the patient may correspond with the editor, receiving advice until cured, on payment of 2s. 6d., as a fee, in the outset. In all cases direct to the Editor of the Family Doctor, 4, York Cottages, St. Mark's-road, Camberwell New-road, London.

Part 4, of The Family Doctor, *Price 6d., is now ready; and may be ordered from any Bookseller.*

THE

FAMILY DOCTOR.

ILLUSTRATED.

No. 22.] NOVEMBER 1, 1845. [PRICE 1½*d*.

ANATOMY, PHYSIOLOGY, AND EXERCISE.

MUSCULAR SYSTEM.

HAVING given a front view of the muscles, we now present the reader with the back or posterior sketch, more especially, as we shall have some observations to make on the spine and its curvatures, produced by a violation of nature's laws, in regard to exercise of the muscles of the back. We have already said, that the natural

colour of the muscles is red, because of the vast quantity of arterial blood supplied to them. This may be discovered by looking at the pale colour of veal, which is produced by bleeding the animal literally to death. Without this healthy arterial blood the muscles not only lose colour, but strength. Again the blood can only become pure upon a diet of wholesome and sufficient food. Finally it can only be purified, or become healthy and invigorating, and of a deep red colour, when subjected to the oxygen of the atmosphere; in other words, unless the lungs inhale abundance of pure air. Look at the healthy ruddy cheeks, and strong sturdy muscular limbs of the well-fed farm-servant, and the pale emaciated bloodless face, slender shrunk muscles, and stooping gait of thousands of our imprisoned artisans, toiling in the noxious atmosphere of our manufactories. Consider for a moment the cause of this difference, or rather, view the opposite habits of the husbandman and the weaver, and the cause becomes apparent. In fact, we must come at once to the kernel of this question of health, for it lies in a nutshell after all. First, food, fresh, sound, and sufficient, is absolutely necessary to produce pure blood, to develop muscles, and to make man strong, active,

and intelligent. Secondly, abundance of fresh air, to purify the venous or vitiated blood. Lastly, exercise, to put the muscular system in action, and, by its operation on the system, to maintain man in vigour and strength, until the frost of many winters whiten on his head. If these three are not conjoined, it is impossible for the system to be in a perfect condition. Food, air, and exercise, form a trinity of their own, whose end is health and long life. Let food be present in profusion, and one, or both of the others absent, as we have often to deplore in counting-houses, warehouses, publishers' shops, stationers' rooms, drapers' shops, and scores of other emporiums of trade and commerce, there indigestion holds her sway and crucifies her victims. But what are we to say when all that God and nature designed for man, and for the enjoyment of which the mechanism of his body was so admirably adapted? What are we to say, I ask, when food, air, and exercise, are all abstracted from our manufacturing population? Simply point to the pale faces, to the languid frames, to the debilitated bodies, to the exhausted minds, and to the crooked limbs, of thousands upon thousands of useful beings, whose years might have been multiplied, and whose productions might have trebled the wealth of an empire, whose greatness depends solely on the muscular powers of its people; which fixes an anchor, or fashions a pin; which twists a cable, or which spins a gossamer thread; which carves a colossal pillar, or which polishes a diamond; which tunnels a mountain, or which eyes a needle; which rears the gorgeous palace, the stupendous tower, and all the edifices of commerce or of utility, of pomp, or of poverty, and which, like the busy silk-worm, in the end, from want of food and strength, of air and exercise, perishes on the scene of its utility, beside the gorgeous works of its own creation. And why is all this misery in existence? Because nature's laws are, to all intents and purposes, violated; because the laws of God, both physical and moral, are broken? well, philosophy must come between ignorance and suffering, and endeavour to restore the lost balance. Yet it is difficult to effect it. A tailor will still sit cross-legged on his board, and keep his back in one position; straining one set of muscles until they are exhausted, become relaxed, and finally yield to the power of another set of muscles which drag the spine out of its perpendicular, and make his back crooked. Let the reader look at the design, he will see a broad set of muscles like shrouds on either side attached to the bones of the spine. Let a person lean on one side, or bend forward continually, then the muscular shrouds on one side will be stretched to the utmost, whilst those on the other will be relaxed. The first will be worn out, subdued as it were, and the second set will be the stronger and draw the spine with a curve towards them, because the opponent muscles cannot resist. Let the reader suppose the spine to be like a mast, and the muscles the shrouds cut away or slackened on one side, and the mast, every one knows would not long maintain its perpendicular. Hence dress-makers, from their bending position,

soon throw the muscles of the back out of action, and these natural stays to the back bone cease to be, as sailors say, *taut*. What is the consequence? A curvature of the spine. But what is more singular, considering that we *have learned something*, is, that instead of exercising the body so as to bring the muscles of the lower extremities and those of the spine into action, to brace up nature's own stays, a pair of man's making are put on to whalebone the back, and lace it round, so that not a single muscle shall be allowed to move in its place. This whalebone coopering of a woman's back must appear to the reader to be a piece of civilised tinkering of the most mischievous tendency, when the beautiful muscular stays of nature are so admirably designed, so beautifully arranged on either side, so mechanically adjusted, that if she was left to have her own way she would keep the spine by the play of her muscles and by the contraction and relaxation, as straight as any pine upon the mountains. Next number we shall take up the subject of exercise alone, and then proceed to some other point equally interesting and instructive.

PRACTICE OF MEDICINE.

WEANING OF INFANTS.

When the mother wants health or strength, has nipples too small, or ill-formed ones; when the infant will not take the breast; when the mother's milk is bad, or in too small quantity; when the mother has weak nerves, or apt to be surprised; these defects spoil the milk: if the child is suddenly taken ill, from the effects of the mother's fright, or anxiety; if the milk is often dried up quickly, when perhaps the infant has the most occasion for it; in such-like cases, it is advisable to wean the child, nay, often absolutely necessary. It can never be necessary to continue the breast more than eight or nine months; but generally, if a child is favoured with a good supply, by sucking, during his first three or four months, and is in a tolerably healthy state, he will rarely be the worse for weaning at this early period; so that if he is not rather weakly, and if difficulties attend his being suckled, there need not be any hesitation about taking him from the breast. If he feeds tolerably with the spoon, and is free from disorder in his bowels, a tendency to convulsions, &c., weaning may be attempted at any time. But if feeding with the spoon is difficult, if the child is much subject to the gripes, &c., another nurse should be sought for, and weaning must be deferred until more favourable circumstances attend. In general, the sooner a child is weaned, the more easily it parts with the breast. Prudence directs to accustom a child to early feed-

ing with the spoon, and to continue the same until the breast be wholly omitted.

Children, if healthy, may be weaned at any age; but as, in general, their digestion grows strong enough at about nine or ten months, they should only be fed once in six hours at the most, during the first two months; should be entirely weaned from the breast as speedily as is convenient, and also from all feeding in the night, for that bloats them; and if they are not used to it in the first week, they will never want it. If they are not disturbed from their birth, in a week or two the child will be formed to a habit of sleeping most of the night very quietly, awaking only when wet, on which occasion it should be laid dry.

The food should be simple and light; not spoiled with sugar, wine, and such-like additions; for they produce the diseases that children are troubled with. Unfermented flour makes a tough food that turns sour before it digests; and well-fermented bread soon turns sour, but if this latter is made into fresh panada every night and morning, or in cool weather, in the morning, the inconvenience of souring is prevented.

To prevent acidity in the child's stomach, by a daily use of vegetable food, give now and then a little fresh broth, made from either veal, mutton, or beef, once or twice in the day. Suppose, for example, a mixture of the equal parts of the gravy which is discharged in cutting a joint that is brought hot on the table, and warm water, to which may be added a little salt, and thus an excellent broth is readily made. This is said to fill children with humours, it is true, but the humours are only of the most nourishing kind. Cow's milk, a little diluted with water, is an excellent substitute for the mother's; yet it is apt to turn sour; rice is not so apt to turn sour as wheat bread is: it therefore would be a more convenient food for children, and deserves to be attended to. Toasted bread, boiled in water till it is almost dry, then mixed with fresh milk, not boiled, is an agreeable change. As the teeth advance, the diet may increase in its solidity.

As to the quantity, let the appetite be the measure of it; observing to satisfy hunger, but no more, which may be thus managed; feed the child no longer than he eats with a degree of eagerness; in feeding, let the child be held in a sitting posture, and thus continue it until the stomach has nearly digested its contents. The too common practice of violently dancing and shaking the child should be avoided.

Never awaken a child when it is asleep, for thus sickness and peevishness are often produced. As soon as teeth appear, give the child, now and then, a piece of flesh meat in its hand to chew, but never give it any confectionaries.

CHEMISTRY.

The temperature of the atmosphere varies with its elevation. All gaseous fluids will allow radiant matter to pass through them without their temperature being increased. The air allows the solar rays to pass through without being heated by their transmission. All the sun's heat is derived by the refracted rays from the earth, and chiefly by actual contact; this accounts for the extreme cold experienced in the higher strata: so that ascending into the atmosphere the heat diminishes at the rate of one degree for every 300 feet. Its density becomes less, and its pressure diminished.

The air is elastic, and capable of compression and expansion, which accounts for the facility with which it is set in motion, and the velocity with which it is capable of moving. Its particles allow of being approximated to a great extent, when compressed by external force; but when this power is removed it has a tendency to separate, or become rarer. Thus, heat expands, and cold condenses the air: this is a common term used to imply the sensation felt on coming in contact with a hot body; but there is another term to express the principle of heat by caloric, derived from the Latin word *calor*, heat. The theory of heat, and of the principle of heat, *caloric* would demand a separate consideration, and a very lengthened essay; but we may condense it so far at present into this:—Caloric is a subtile fluid, the particles of which repel each other, and attract other substances. It is present in all bodies, and cannot be wholly abstracted; it neither increases nor diminishes the weight of any body, but only tends by the repulsion existing betwixt its own particles, to remove the particles of any substance upon which it acts to a greater distance from each, or, more plainly speaking, to expand them. Thus, when a bladder partly filled with air is brought under the influence of the fire, the caloric repels the particles of the body on which it acts. It expands the air, and fills the bladder. Cold has an opposite effect; for if we remove it to a distance from the fire, the bladder becomes flaccid, as before. Thus, the elasticity and expansion of the air are proved; but air also expands from diminished pressure. Thus a baloon when it ascends high into the air, the gas from the decreased rarity and diminished pressure, has a tendency to expand, and ultimately would go on expanding, until it burst the silk globe in which it was confined, unless the æronaut was provided with stopcocks and pipes to allow it to escape. If we sink a bladder (in water) half full of air, it will raise a heavy weight to the surface. Again: invert a glass, containing air, under water, heat the upper part of the glass and the air will expand and force out the water. These are familiar instances of the last property of the atmospheric air to which we shall direct the reader's attention. We conceive that every one will fully understand our essay. But it was not written and inserted here with the view of teaching chemistry, although that is a vital science in

medicine, and may prove instructive to many, who either could not procure expensive chemical works, or, procuring them, read them with advantage. We purpose to turn the knowledge acquired concerning the composition of the atmosphere *to the important question of* VENTILATION, *one of the most paramount interest to the public, as far as regards comfort, cleanliness, and health.*

CLOTHING.

BY DR. FLETCHER.

(*Continued from our last.*)

In the north of England clogs are much worn by the working classes, particularly the women: their use is advisable, as it is difficult to obtain shoes, which are completely water-proof. They are also of late occasionally used by many of the other classes, and by ladies in the form of spring clogs, as they are called. Those who are liable to coldness of the feet, which is in itself an indication of a deficiency of vigour in the circulation, should be particularly careful to counteract it by the use of woollen or worstead stockings, and socks as well as clogs, or double soled shoes.

It is very usual with females to have the back of the neck bare. This is one source of the stomach complaints to which they are so liable, which are often found to originate from, or to be connected with, irritation in the upper part of the spinal marrow. Epilepsy, and other serious affections of the nervous system, often result from the same cause. The absurd fashion which now prevails, of men having their hair cut close on the back of the head, is equally objectionable. Nature caused it to grow there as a protection to an important organ, and the intentions of nature cannot be thwarted without injurious consequences.

Our next consideration is, the form and disposal of dress, as it affects the growth and action of the limbs, and internal organs. In this respect much mischief has been done, by the absurd fashions which caprice and ignorance have introduced. Wherever any article of dress is so applied as to prevent the perfect action of any of the muscles, or the free motion of a joint, if the restraint be long continued the power of the limb will be lessened, and probably deformity produced. Still more serious mischief may be the consequence of pressure on large vessels, particularly the veins of the neck, and on the cavities which contain the vital organs. I shall first notice the common errors in male attire, and afterwards the still more serious ones in the dress of females.

In men the trunk of the body is left tolerably free from any injurious pressure, except in those silly individuals, of whom there are

now too many, who attempt to improve their shape by wearing tight belts round the waist. The effect of these absurd contrivances will be pointed out when I come to speak of women's stays. In that sex, the vanity which dictates the use of them is excusable, in men it is particularly disgusting. By some men they are used as a means of strengthening the body, but, though the support they give to the muscles may in some cases be useful, their injurious effects more than balance any benefit which can in this way be derived from them. With the present form of dress the use of braces is almost indispensable, but particular care should be taken that they do not press uneasily on the shoulders. Few persons are aware how slight a degree of pressure will produce deformity. A little reflection on a fact which is familiar with most people, will make this better understood. It is generally known, that even the strongest man cannot support the weight of his own arm, held out in an horizontal position, for many minutes. The muscles, as I have before stated, cannot remain long in a state of contraction without fatigue, and they soon yield to even the slightest force which is unremittingly opposed to them. Even a slight continued pressure on the shoulders, therefore, causes a yielding of the muscles, by which the trunk is kept in an erect posture, and a person subjected to it becomes round shouldered, which is not only in some degree a deformity, but which lessens the capacity of the chest, and is therefore really injurious.

It is of great consequence not to wear tight stocks or neck-cloths, particularly as regards those who are of a full habit, or have a tendecy to determination of blood to the head. By their pressure on the veins, they prevent the free return of blood from the head, and thus cause a loading of the vessels of the brain, which may produce apoplexy. Tight garters are also objectionable. They not only embarrass the action of the muscles, but by their pressure on the veins they prevent a free circulation, and thus increase the tendency to what are called varicose enlargements of the veins; a disease of frequent occurrence among the numerous classes whose employments require them to stand during a great part of the day, but which is most frequently met with in women.

The use of stiff boots, and especially of the strong laced boots, which are much worn among working men employed in out-door labour, is objectionable, inasmuch as they so far prevent the motion of the ankle joint, that those who wear them acquire a plodding pace, bending the knee and hip joints only, instead of propelling the body with the springy motion, which is produced by the extension of the foot by the strong muscles which form the calf of the leg, aided by the beautiful arrangement of the bones and cartilages forming the arch of the foot.

In waggoners and carters, who generally use boots of this kind, we consequently see, that instead of the muscles of the calf being large and strong, as might be expected, from the constant habit of walking, they are remarkably small. It is only necessary to watch

the mode of walking of these men, to understand at once the reason of this. The muscles of the thigh will be found in the same individuals very well developed. Those, therefore, who wish to walk well, and to have well-formed legs, should not use boots except for riding. The boots generally worn are not calculated to confine the ankle so completely as those I have referred to, but they do sufficiently so to interfere materially with the motion of the joint.

Mr. Meyrick, in a paper published some years ago, on the armour in the Tower of London, expressed great surprise at the extreme smallness of the greaves, or leg pieces. Those of John of Gaunt, commonly known to have been a man of gigantic stature and bulk, are not sufficient to contain a well-formed leg of an ordinary-sized man. That these stalwart knights, of whose extraordinary feats of strength and courage every child has heard, should be such a spindle-shanked race, does not appear to me at all extraordinary. It is a striking and valuable illustration of the law on which I have dwelt, that every organ acquires or loses power, and as respects the muscles, bulk, in proportion as it is actively employed, or the contrary.

(To be continued.)

PHARMACY.

CLYSTERS.

Cathartic or Purging Clyster.—Compound decoction of mallows ten ounces, Epsom salts one ounce, olive oil two ounces.

2. Take manna one ounce, decoction of camomile flowers ten ounces, olive oil one ounce, Epsom salts half an ounce.

Opiate Injection.—Infusion of linseed eight ounces, tincture of opium one drachm: in pains from stones in the bladder, &c.

Injection of Cinchona (Peruvian bark).—Bark in powder one ounce, camomile flowers two drachms, distilled water one pint, boil down to ten ounces and strain. This is an excellent tonic injection, and may be used in cases where the bark cannot be given in any other way.

Injection of Starch with Opium.—Starch, from one drachm to two, cold water two ounces, warm water four to six ounces, opium two grains to four. Rub the powdered opium and starch together till they are minutely divided; then add gradually the cold water, and lastly the hot water.

A common Injection.—Barley water from one pint to two, olive oil two ounces, Epsom salts one ounce. Mix them for use; or, to the barley water add from two to three ounces of olive oil. The first is well calculated for emptying the lower bowels, without stimulating

them too forcibly. When the decoction of barley is used for injections, it should be much thinner than as directed for a demulcent drink, which, if diluted with an equal portion of boiling water, answers very well.

Injection of the Gall Nut.—Powdered galls one ounce, distilled water one pint and a half; boil to a pint and strain. This injection administered two or three times a day, will be found to afford considerable relief where there exists a tendency to a frequent falling down of the fundament; and it is also often very proper in the bleeding piles; and, in some cases, two or three grains of opium will give increased effect to this injection.

Injection of Castor Oil.—Castor oil and honey, of each one ounce, infusion of linseed ten ounces; rub the castor oil with the honey until they become intimately blended, and add the linseed infusion gradually.

When an injection is intended to act quickly on the lower bowels, this will be found in general safe and effectual.

DIALOGUE

WITH A TEA DRINKER.

"Well, my good woman, what have you got to say?"

"I have come for your advice concerning a complaint in the stomach, that troubles me very much."

"State your symptoms."

"I complain of fullness at the pit of the stomach, colic, and shooting pains, giddiness, feeling of sickness, bile, bad taste in my mouth in the morning, belching, and general weakness."

"What are your habits: you dont drink, do you?"

"Oh! no sir. Nothing but tea; my husband drinks for both of us. I hate the very sight of drink."

"How often do you take tea?"

"It is my only comfort, sir. I have some warm in the morning, and then at breakfast; sometimes when I am tired I take a quiet cup at noon; then at regular teatime I enjoy myself."

"With how many cups?"

"Three or four, perhaps five."

"And you eat first?"

"No, sir; I don't care much about eating; I like a cup of hot tea, for it does my stomach good, but I am obliged to take it often again to relieve me of the head-ache, drowsiness, and a lazy feeling that gets over me."

"Are you aware of the cause of your stomach complaint?"

"No, sir; unless it be constitutional weakness."

"No such thing. It springs from the same cause as the drunkards."

"Nonsense, Dr. I told you I drank nothing, and it is God's truth."

"Excepting the tea."

"Oh, yes, excepting the tea."

"Well, are you aware that excessive tea drinking, soda water drinking, or ginger beer drinking, are, if possible, more likely to produce these feelings than even spirits."

"I don't believe a cup of good tea can do any one harm."

"Are you sure it is tea you drink?"

"I am sure of it, because I mask it myself."

"Aye, but did you see it made before it was masked, for masked it is to all intents and purposes. Hawthorn and sloe leaves are masked so as to represent tea—old leaves are re-dried, and your masking only produces the worst part of the refuse of the leaf. Besides verdigris, such as you see on an old penny-piece, is used to dye the leaves green. The sour sloe-leaf or the verdigris, either will account for the colics, shooting pains, head-ache, and giddiness."

"Doctor, do you mean to say, doctor, that it is so?"

"I mean to say that any custom-house officer can tell you how many seizures are made of cheap unadulterated teas. Let me continue, supposing it to be a wholesome article, you drink large quantities, you distend the stomach, sit without exercise, relax its fibres, render it sluggish in action, and leave the food undigested to struggle through the system the best way it can."

"Bless me, can that be true."

"Perfectly so! Drugs of all kinds are introduced to the tea drinker, and thousands without knowing the cause, drink destruction to themselves amidst the family circle, sink slowly in health, as if poisoned, and gradually perish without once detecting the fatal cause that hastened their doom."

"What villany there is in this world!"

"Yes, one portion dye for gain, another die through tea, yet the poor are the greatest sufferers in body and mind. The colouring matter is rank poison in itself, and will create an amazing commotion in the system, but who detects the cause, or would suppose it to be lurking in tee-total tea."

"What am I to do?"

"That is the question! The poor have no other alternative, but to buy cheap, as they are bought cheap themselves. They buy poison. If you can afford it, buy a superior article, and above all drink little of it, for whether good or bad, the stomach will not contain it if poured in, in large quantities."

"The government ought to interfere."

"So it ought, but the government wants revenue, as much as the poor want wages; and therefore, the system will continue, and cheap

tea poison, act as a curse and a scourge on the fairest portion of God's creation, those who bore us, those who pass through life's trials with us, those whom we all love—The women.

MEDICAL ESSAY.—(*Continued.*)

SOCIETY AND QUACKS, DOCTORS AND DISEASE.

The reader may ask me what remedies should be used. I answer, only those medicines which are recommended by nature, proved by reason, and tried by experience. Where are you to find them? In the storehouse of nature, from which observation and reason have dragged so many excellent things to mitigate the sufferings of man. How are you to find them? In answer to that, I may inform him that, on one occasion, a huntsman desired me to go and bleed one of his sick dogs. I inquired into the cause of illness, whether it arose from hard hunting or over-feeding. I could gain no information as to the cause of the mischief; therefore, under those circumstances, the remedy of bleeding would have been quackery, and the result would have depended upon chance. I therefore refused to bleed the dog, because there was no reason to justify me; and my advice to you, reader, is as follows—never allow your medical man, or your quacks, to give you any medicine without a reason, or attempt to cure a disease, unless they can describe to you the cause of it. I ordered the huntsman to turn the dog into the woods. "Why so?" said he. "Because," I replied, "when man is at a loss, it is time to let nature speak and act for herself." The dog was let out of the kennel, and it went off in search of medicine in the woods. We followed it, and had the satisfaction of seeing it stop and eat a peculiar kind of grass. "Now," said I, to the huntsman, "we have learned a lesson from a sick dog, which the wisest man in England could not read to us. That grass is nature's best remedy for the dog's disease; therefore, on all future occasions, when you find your dogs sick from being cooped up in a dirty kennel, turn them into the woods and let them feed upon the medicine which nature has provided for them, but which you and I, saved for observation, never would have known." I have acted upon this system. Many medical men have despised nature's suggestions because of their simplicity; the Indians—nature's children—have used them because of their certainty in cure, and general usefulness. The rule of nature is to prevent mischief, rather than cure it; and when she must cure it, she adopts the most simple and effectual remedies, if man would but study her lessons, and confide in them. I have made a point, for instance, of ascertaining from travellers, and my own relatives who have mixed with the Indians, the peculiar means of prevention and cure adopted by them; and it is surprising how many Indians arrive

at the most advanced ages, in despite of climate, war, and privation, and cure the most severe diseases by the simplest means. I would therefore, take nature as my teacher, and look upon her to be the first physician.

The wild Indian can supply remedies wonderful for their cures, which would put the whole profession to the blush. And the time will arrive when, instead of having only one or two medicines certain to cure, nature will be more narrowly watched, instruction drawn from her, instead of from books, and science made the handmaid, instead of the mistress of nature.

The reader will now perceive that I do not condemn the professors of health, because of their difference with me, but because of their differing with nature, and to prove my position the better, I will now describe the origin and progress of diseases.

There are two classes of people in this country who are afflicted with almost similar diseases. The artisans, who are employed in overheated and unhealthy workshops, during many hours of laborious and wearisome application, and the middle classes who are confined to counting-houses and chained to high stools in narrow little boxes, and behind counters of shops, the atmosphere of which is loaded with the vapours arising from bales of goods and gases, injurious to the system.

I have always observed that the long application of hand and mind to any given task, soon reduces the bodily and mental vigour; the frame becomes thin, lank, and lean, the face sallow, the eyes sunk, the limbs nervous and trembling, and the temper irritable. It cannot be denied that a legislative remedy could be found for this evil, but to wait until it is applied, is to allow the plant to wither when the reviving waters are near.

The general symptoms of debility soon give place to local diseases of the most fatal and distressing character, which, springing from one origin, run their painful course, striking down the weakest, and overtaking the strongest. If I wrote upon the diseases of individuals, I would require to devote a page to every case, and then the patience would be exhausted before conviction could be secured. I shall therefore direct the reader's attention to the course of disease generally, leaving the afflicted to draw their own cases from the general history of suffering, disease, and death.

When the mind or body is overtasked, and unnatural habits encouraged, the stomach is the first to give warning of the danger. At meal times, the patient feels a faintness and sickness, which he says is the heart turning against his food. Should no regard be paid to this, the general symptoms of indigestion appear, and a sense of fulness after meals, heartburn, belching and vomiting follow. The brain next takes up the alarm, and headaches, dizziness, confusion of intellect, dimness of vision, a hot and cold feeling, dryness of skin, nervous tremblings, and, if all are disregarded, fevers, convulsions, and fits, weaken and harass the sufferer. When disease is allowed to

run its course, or a bad remedy is applied, the patient is sure to have a visit of suffering to almost every part of his body.

Nature is a most anxious and importunate friend of man, and she will annoy him until her advice is attended to. It is his own loss to rebel. We have therefore, in some constitutions, bilious complaints, constant headaches, jaundice, restless nights, and drowsy mornings, following each other, until the unhappy patient is almost ready to invite death to put an end to his misery. He has no comfort during the day, no sleep at night, and no appetite in the morning; neither will nature grant any relief, until he seeks it in her way. Some of the wise do so, but many fight with her, and forcing meat and drink with great industry down their throats, are deservedly punished for their folly. To keep them from mischief, nature sometimes steals their teeth; hence the old saying, "that many a fool is beaten with his own rod." In some constitutions the circulation of the blood is obstructed, and the working of the heart irregular; hence we have swellings in the feet and legs, which terminate in alarming sores and wide-spreading ulcers.

The lungs are not the last to return a verdict against the system of slow murder, and by a difficulty of breathing, a touch of asthma, and no breathing at all, she ends the question which has been pending between the laws of nature and the crimes of man.

The reader should observe here, that it must be a wonderful constitution which could bear such a load of disease. Individuals are differently affected by the same cause; some have diseases seated in the liver, others in the brain, a third in the kidneys, a fourth in the heart, a fifth in the skin. Why should such varying symptoms arise from one source? Because, when nature is insulted and robbed of health, she generally runs round the whole frame of man, creating, more or less, disturbance, anxious as a mother to regain her child, and if unsuccessful in pursuit of her dearest treasure, she is sure to settle down on the weakest part, and mercifully torment the patient into a sense of his own danger and the certainty of death.

Every patient may fully rely upon the truth of the observation, that the part of the human frame most frequently affected with disease, such as the throat, lungs, brain, or liver, is the weakest in the body; and, therefore there is greater danger when assailed with disease.

[Next week we shall conclude the essay with advice as to the means of preserving health.]

A gentleman came up from the country, to consult an eminent surgeon for a swelling in his knee. Besides prescribing the proper remedies, the surgeon advised him to bathe his knee frequently with *tepid water*. "And pray, sir," said the gentleman, believing the best advice incomplete without the best application, "And pray sir, where shall I be most likely to procure the *tepid water* genuine?"

JOKES FOR INVALIDS.

BY PROBE.

An apothecary the other day, whilst being consulted by a dropsical patient, found himself unceremoniously *tapped* on the shoulder by Mr. Doe, a well-known messenger from the Queen's Bench, who politely invited Mr. Pestle to visit a patient in that locality. The apothecary had a thorough repugnance to be *bolted in* with any patient, and therefore *bolted out*, leaving Mr. Doe in utter astonishment at the muscular effect of his message; but a friend of his accidentally passing, of the name of Roe, hearing the exclamation of Mr. Doe, knowing the apothecary to be a very *irregular* man in many respects, and conceiving he had either pulled a tooth or not paid a debt, endeavoured to arrest him. Mr. Pestle, who was a most *scientific* man, extracted two of Mr. Roe's teeth in the most *professional manner*, and, without waiting for the payment, continued his flight. Richard, *as soon as he was himself again*, started off in hot pursuit to *serve Mr. Pestle out*, and his friend Doe followed to assist *in the process*. When Richard overtook Pestle, who ran like a pill-box, he almost shook the breath out of him. The apothecary remonstrated, exclaiming, that such conduct was quite unprofessional. "Unprofessional!" said Richard; "eh; what do you say, you rascal? Don't you write on your own labels, *When taken to be well shaken?*"

TO CORRESPONDENTS.

P. T. B., Clontarf, Ireland.—The supposed cause is not stated, but it is evident that the liver and stomach are both out of order. Try for a fortnight Blue Pill, three grains, powdered opium half a grain, made into a pill; one every second night. Take at noon half a drachm of tincture of cardamums, half a teaspoonful of carbonate of soda in a tablespoonful of cinnamon water.

A. M., Constant Reader.—No doubt but he caught an inflammtion of the side through the rapid change of temperature, nor will his trade as a blacksmith much serve the end of a cure. He ought to put on a good large blister at once. Bleeding is of no use now. After the blister has healed; then rub in night and morning with hartshorn and oil before the fire. Open the bowels, and be careful as to living.

Subscriber.—D.D. instead of M.D., we should think would serve a teacher best. The degree of M.D. cannot be obtained in Scotland without going through the regular period of five years' study, and passing an examination. We are not aware of any other method. If Subscriber has studied medicine, the cost at St. Andrew's would not exceed £20.

A. A., Subscriber.—In the course of our anotomical articles we shall not only touch on the arterial and venous system, but illustrate in our usual manner these important subjects. The plate he alludes to as having seen, will appear in due time, and in an admirable style of engraving. Joyce, our engraver, is one of the first in London.

W. M. C., Paisley.—That affection of the hip and the consequent confinement, no doubt, shattered his constitution. If he desires it, we shall send him a box of pills, and advise him to procure some infusion of wormwood, making it in the same manner as infusion of columba, and using it in a similar quantity. The cold water suffusion would also be of great service to him.

W. M. F.—Such morbid appetites generally spring from inflammatory affection of the mucous membrane, worms, affection of the liver, &c. The best thing he can do is to put nature right again, and we think two grains of calomel, and five of jalap, administered twice a week, will be the best thing to be done in the meantime.

L. L., Leeds.—What does he mean by knots and veins swelled? We could wager the complaint to be varicose veins. Are the veins swelled and crooked, always full, and knotted here and there? It is no use prescribing unless we know more.

L. P., Rochdale.—Sponging the body with water and muriatic acid, one teaspoonful of the latter to a basinful of the former, will be very refreshing and beneficial. The exercise with dumb-bells is the best, indoors, also dancing. A pill composed as follows, would be very useful, occasionally:—Pil. hydrg., three grains, ext. colocynth, three grains, ext. hyosciam, a quarter of a grain. M. f. pilula dos. vi. Cold water over the head every morning, short hair, moderate living, and exercise, would soon remove the cerebral symptoms of fullness, flushing, &c. Before anything is done, a smart dose of opening medicine should prepare the way for the above advice.

X. X. X., Knaresborough.—Sponging with muriatic acid and water. Cold water dash. Pulv. opii, half a grain, ext. cenii, a quarter of a grain, pil. hydrarg. three grains, f. pilula. Dos. vi. One pill every third night at bed time.

D. M. G., Dudley.—We have not had time to look out for the receipe, but here is an antibilious pill. Aloes, three ounces, gum mastic, one ounce, oil of absynth, two drachms, tincture of aloes, as much as will make it into a mass. Divide into five grain pills.

P. G. Manchester.—His complaint seems to be *caries* or ulceration of the bone and the cause syphilis.—This is a complaint very difficult of cure for the old bone must come away and new bone be formed before anything can be done with the limb. There have been many cases completely cured, and we do not see why he should despair.—The treatment which we have known to succeed, has been by fomentation, poultices, contra irritation and the red hot iron.

D. D. D., Ironmonger.—From what he states it is very questionable whether the hip joint was not thrown out on the edge of the cap, as we have known it to be. It will even form a new cap for itself, but the use of the limb is partially lost. It must either be so, or a portion of the bone has become absorbed to cause the shortening of the limb. Inform us how it happened and if there was any fall or twist.

Private Correspondents.—Although two or three expected public, we gave private answers.—We trust the medicne arrived safe, as the Post Office folks are very careless, and saucy into the bargain.

To the News Agents and Readers.—Many of the numbers of the FAMILY DOCTOR being out of print, and not to be had except in the parts we have resolved to bring the first volume to a close with our 26th number; after which we shall begin a new series. Previous to that time we shall have re-printed the numbers wanting, and any one can have sets complete, or the 1st volume complete with our 26th number. The new series will be still further improved, and rendered worthy the unexpected encouragement we have received. The printer had better be informed of the number of copies required by the agents.

TO CORRESPONDENTS.—We shall consider it a favour if all letters, requiring answers on the Saturday, should be forwarded so as to reach us on Tuesday. We will not answer for their insertion, if they reach us on Wednesday. The correspondence is now in the Printer's hands, and yet we cannot retard the printing and publication, to reply to several letters just arrived.

N.B. Medical Advice will always be given to any person (gratuitously) through the pages of the FAMILY DOCTOR; but it is necessary to give age, sex, employment, symptoms of disease, length of its duration, together with the most probable cause, or at least to describe the commencement of the attack. Any one may have advice through the above medium—viz., *answers to correspondents*, without the necessity of giving their names, or the possibility of their being made known; only, there may be questions which we shall decline answering in our pages, in which cases the patient may correspond with the editor, receiving advice until cured, on payment of 2s. 6d., as a fee, in the outset. In all cases direct to the Editor of the FAMILY DOCTOR, 4, York Cottages, St. Mark's-road, Camberwell New-road, London.

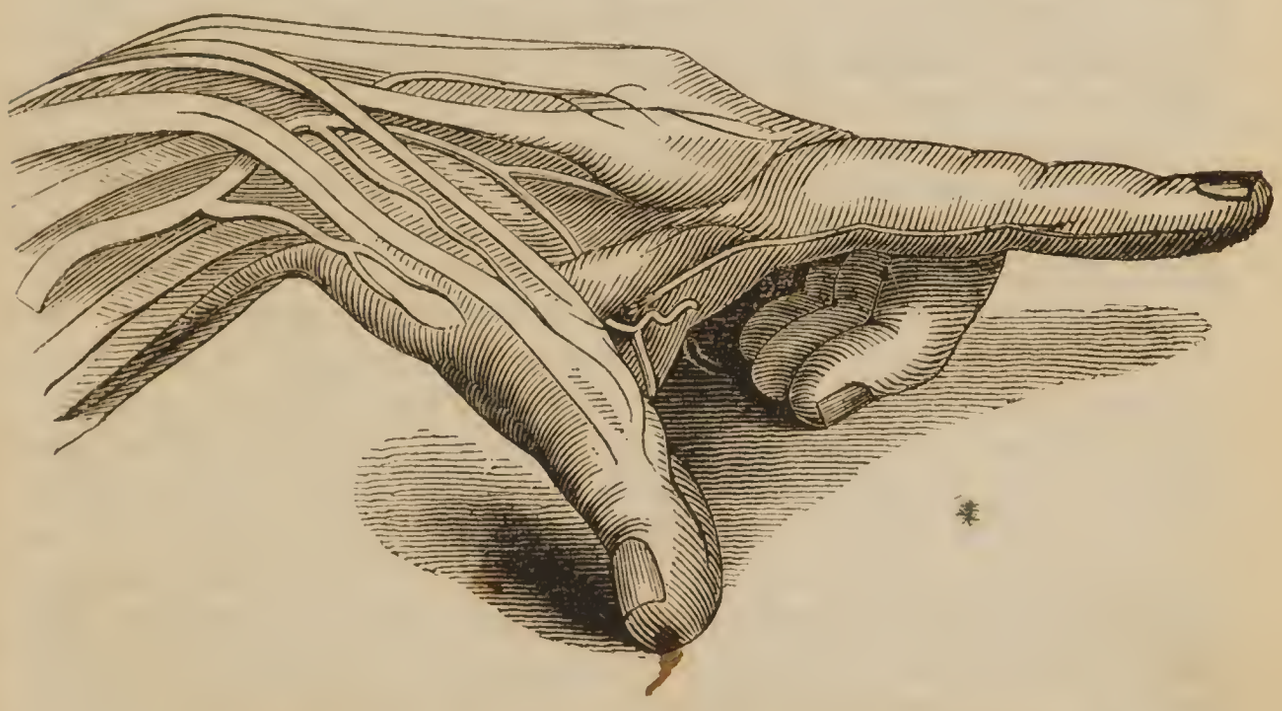
Part 5, of THE FAMILY DOCTOR, *Price 6d., is now ready; and may be ordered from any Bookseller.*

THE

FAMILY DOCTOR.

ILLUSTRATED.

No. 23.] NOVEMBER 8, 1845. [PRICE 1½*d.*



EXERCISE, HEALTH, AND LONGEVITY.

WE have prefaced our observations this week with a drawing of the muscular tendons of the wrist and hand : the vast importance of which we well know in the varied movements required in writing, etching, drawing, &c. A band surrounds, or gathers together, these tendons, which, under the influence of muscular contraction, and relaxation, bend or extend the fingers, and turn or alter the direction of the wrist and hand. The artery, the pulsation of which is felt at the wrist, may be seen winding amongst the tendons, and throwing out its branches to the fingers. This drawing will serve to illustrate the peculiar mechanism of such a wonderful formation as the hand. It is designed by nature to serve so many important ends to man, that its construction formed an important feature in the celebrated Bridgewater Treatises.—We shall not pause to describe minutely that which can only be perfectly understood by actual observation in dissection, but it will serve our purpose well, as an evidence of muscular arrangement, and of the influence which exercise has on the development and the power of these muscles.

We shall begin with the exercise necessary for children, and young persons.—It is wonderful how much nature adapts the minds of children, for all kinds of exercise in the open air; but the philosophy of her muscular exercise, rests on amusement. It remains for man to combine instruction with it. We once entered a school in Scotland where the principle of amusement was thoroughly combined with instruction, and the progress and intelligence of the children was really remarkable. For instance there was a geographical exercise, which consisted in mounting all the younger boys on a round backed bench like a saddle, where whilst riding in a row to their heart's content, they all repeated a species of chaunt, which varied in the following manner. "We will ride to Paris, to Paris, to Paris, the capital of France," and so on it went changing, until every capital in the known world, with the countries to which they belonged, were recited in the midst of fun and hearty enjoyment, without the slightest mistake. Any of our readers can comprehend the importance of clothing historical or geographical truths in a rhyme, and chanting that rhyme during a game of romps. The above in our opinion, though on a small scale, will convey our idea of exercise and instruction conjoined. Reverting once more to our main question of exercise, we conceive that the chief ends of exercise for young persons, should be to bring all the muscles of the system successively into action. The muscles of the limbs should be hardened in the active pursuit of the hoop, or of the foot-ball. The arms and muscles of the chest should be strengthened by climbing, and if old enough by rowing boats, playing at the hand ball, and pitching weights. The muscles of the spine will be brought into play by leaping, wrestling, leap-frog, &c. Boys should be taught to walk long distances, and for that end, fishing in some distant stream will be an

admirable method of making them endure fatigue, as there is an object and pleasure in the pursuit, which will maintain the strength to the last. We have ourselves walked 25 miles to the head of a stream and fished, returning home without feeling any other inconvenience than being sound asleep next day two hours later than usual. Another very important matter for boys, is to teach them to swim as soon as possible, and to accustom them to relish that exercise in the refreshing and invigorating water. By all these modes of exercise, and by many others, which it would be tedious to mention, the circulation is increased, the blood more frequently refined by the oxygen of the atmosphere, and the spirits elevated, lungs, limbs, and sinews strengthened, hardened, and prepared for the rough shocks and trials of the world, either physical or mental. Can a child brought up in that manner, be compared to one who is confined, nursed, and guarded from every breath that blows, whose face is pale, whose muscles are weak, bloodless, and powerless, and whose body is scrofulous; for we maintain that the want of exercise produces that complaint, or at least developes it more than any other cause. People however, say it is vulgar to allow children to play, and they must not go amongst blackguard boys. I heard a very eminent clergyman once remonstrate with his brother, because he kept a tutor, in the following language. "A tutor, bah ! send them to the public academy, let them fight their own way," and by emulating others, know how to advance themselves in life. "What is an academy but life in its boyhood. Shut them up in a parlour, what will they know of the world they must move in. No, no, depend upon it, your hot-house plants, won't stand the cold, callous air, of general society, and they must come to that in the end. Then let them know something of it when they are young. Let them wrestle, run, and jump, and climb, with the best of them, and beat them if they can ! either in spirit or learning. Tutors indeed !" Girls, on the other hand, require a more gentle treatment than boys, but their frames ought to be developed by every kind of exercise, suited to their gentle nature :—What can be better for the limbs, than the skipping rope, for the arms, than the shuttle-cock, or swinging, dancing, archery, riding, walking, singing, reading aloud, and recitation. So much is known in regard to the kind of exercise, that we may leave that division, and proceed to another much less known :—viz : the rules to be observed in conducting these exercises :—The first thing is to prepare children gradually for exercise as an excessive addiction to it may prove prejudical and weaken, and exhaust the frame, instead of strengthening it. The next point is sufficient nourishment, because exercise producing increased waste, demands an increased supply to uphold the system. The aim of exercise should be amusement, that is to say, there should be no task about it. Children should not be permitted to take violent exercise before or after meals, nor should they sit down on the grass, or stones, or stand still when heated, nor should they be

encouraged to play except in midsummer after sunset. Weakly children should be brought gradually into exercise, and the best way is to begin by baths in the morning, becoming gradually colder, from lukewarm at first, until it at length reaches the ordinary temperature. The clothing of children should be perfectly free and easy—all belts may produce serious mischief, and predispose to troublesome affections in after life. They should be taught to remove the belts previous to amusement, also their coats, and to resume them immediately their sports are concluded. The best period for sports is the morning and evening, the place should be dry, open, and elevated, so that the air may be pure. Finally, amusing exercises in the open air, and nourishing food are the first things to be observed. Then care as to their duration and violence should be next observed, so that no undue exhaustion should follow undue exertion, and holding all those things in view, any parent may make the weak strong, the healthy, stronger. We must still encroach further on our space and the reader's patience, by next week referring to the rules necessary for adults, when exercising themselves.

PRACTICE OF MEDICINE.

RICKETS.

This disease, to which children are liable, especially between six months and two years of age, arises generally from mismanagement in the nursing and rearing of children, and in the diet of the mother. It arises from the absence of the phosphate of lime, leaving only the soft animal matter behind, which yields to the weight of the body, and causes the spine and limbs to bend and twist out of all shape. A child may be very plump and healthy until teething begins, when the *symptoms* are as follows. The appetite fails, the child becomes emaciated, sallow, and listless. The flesh becomes loose and flabby, dry and harsh. The liver, spleen, lungs, and stomach, are all effected, and the head becomes enlarged. There is an appearance, too, of withered old age. Another important feature is, that the urine is diminished in quantity, whilst there is, at the same time, a white sediment deposited, which is the phosphate of lime.

The distinctive feature in the disease is, of course, the bending of the limbs and the curvature of the spine.

Treatment.—The cause should first be discovered, and if the diet has produced the affection, it must be altered. A warm bath, and the use of flannel is highly proper, and exposure, when the weather is mild, to the open air. The diet should be nutritious, such as milk, animal jellies, eggs, rice, &c., avoiding sugar, and all spirits or malt liquors. The bowels must be attended to, and kept regular.

The chalk mixture is very good, also carbonate of lime. Tonics, such as infusion of columba or gentian, will be found beneficial. These are a few particular remedies, but the remainder had better be left to a medical man. The general points to observe are, rest in the horizontal position, sea-bathing, friction over the whole body, and strict attention to the diet and bowels. Iron supporters are here used, because there is no fulcrum for muscular action.

MEDICAL ESSAY.—(*Concluded.*)

The next important point for consideration is the preservation of the health, because our readers may feel assured that prevention is worth all the cures in the universe. Yet although men see their neighbours sink down under the stroke of disease, they never think of averting those small causes, which produce, every day, such great and lamentable results. Trifles disregarded, grow into serious evils; a derangement of the bowels disregarded, may end in disease of structure, indigestion, inflammation, and death. A trifling cold of no consequence apparently, extends to a lingering consumption. Wet feet, damp beds, exposure to cold, although not regarded at the moment, are each frequently succeeded by rheumatism or fever, and the constitution broken up for life. But it is far more extraordinary to notice the evils which spring from the careless, every day habits of men, and how little care is taken of that precious gift, health, which is confided to their keeping. It is to guard against common causes of disease, and suffering, that we have drawn up a few brief directions for the guidance of our readers.

1. We will suppose the hour has arrived for bed. Let it be early, and regularly kept. The bed-room should be large and roomy, with at least a chimney in it to act as a ventilator, no fires should be lighted during the evening. Early rising is conducive to health, as much on account of the impure air of a bed-room as on account of the freshness and invigorating qualities of the morning air. As soon as you are dressed, throw open the bed-room window, and admit the pure air, to sweeten the apartment

2. Every person should, immediately after getting out of bed, dash water plentifully over the face, or pour a jug of cold water over the head, or take a shower bath, the latter being adopted gradually until the system can bear the shock. After washing or bathing, no matter whether a person goes out to walk or work, a teacupful of warm milk, coffee, or tea, with a small morsel of bread, should be taken before going into the open air. No spirits or smoking, but something pure and mild, for nature's first morning call. After this, a walk, or labour, will be undertaken with wonderful vigour; all faintness soon removed, and hiliarity of mind established.

3. Breakfast should be about eight o'clock, supposing the above morning's draught taken at 6. This meal should consist of fluids, as we waste much by perspiration and breathing during the night. Coffee and milk, boiled separately, and mixed in equal proportions, will be found to be the best for the generality of men: some prefer tea. We do not recommend animal food at this meal, nor any strong drinks; eggs, a slice of bacon, or fish, may do. But whatever is taken, it should be remembered, that naturally the breakfast is a light meal, and one after which we put the mind into great activity, consequently the stomach should not be overloaded. It may do very well for idle people to eat slices of beef, fowls, and ham, stewed kidneys, and the lord knows what all; but any man of active habits of mind or body must very soon discover the propriety of making a light meal, so as to meet a heavy day of mental labour. After breakfast, it should be a strict and invariable rule to abstain from all intoxicating drinks until after dinner. This is most important, and most men of business have found it so.

4. The dinner-bell, as Byron says, is the tocsin of the soul. This is the meal of the day, and then animal food is absolutely necessary for men who work with either hand or mind. This meal should be abundant, and there are very brief rules connected with it:—Eat first and drink afterwards; but do not flood your food in your stomach by pouring in buckets of ale and quarts of wine. Chew the food well before swallowing it, and be in no haste about it. To sum up, go to dinner slowly, eat slowly, and come away slowly, always resting at least a quarter of an hour before, and the same time after this meal, and invariably leaving table with the remnant of an appetite.

5. In regard to tea, beware as to drinking out of basins or small washing tubs, as is the fashion now. The stomach is swelled out like a pair of highland bagpipes, and can no more contract upon its food than a blown bladder. Indigestion is oftener produced at the breakfast and tea-table than at the dinner-table, by distending that organ with a mess of dishwater.

6. Supper should be exceedingly light; eggs are probably the best, but we are no advocates for this meal at all—it should never be a meal.

7. Temperance must be observed in eating, sleeping, walking, working, talking, drinking, &c.; and as asses only eat when hungry, drink when thirsty, and stop when nature is satisfied, why should not man follow the example, and reap the benefit?

Lastly. In regard to clothing, let it be according to the season; but rather wear a bad hat than a bad pair of shoes. Never sit down wet. Never read too long, walk too far, or work too much; above all things, and everything, keep the bowels regular, the head cool, the feet warm, the mind easy, and the body active, and both in exercise; and, as the Irishman says, "Long life to you!"

OF BLEEDING AT THE NOSE.

Bleeding at the nose is commonly preceded by some degree of quickness of the pulse, flushing in the face, pulsation of the temporal arteries, heaviness in the head, dimness of the sight, heat and itching of the nostrils, &c.

To persons who abound with blood, this discharge is very salutary. It often cures or prevents a disease; and in all cases where bleeding is necessary, a spontaneous discharge of blood from the nose is of much more service than the same quantity let with a lance.

In a discharge of blood from the nose, the great point is to determine whether it ought to be stopped or not. When it happens in an inflammatory disease, there is always reason to believe that it may prove salutary; and therefore it should be suffered to go on, at least as long as the patient is not weakened by it. When it happens to persons in perfect health, who are full of blood, it ought not to be suddenly stopped.

In fine, whenever bleeding at the nose relieves any bad symptom, and does not proceed so far as to endanger the patient's life, it ought not to be stopped. But when it returns frequently, or continues till the pulse becomes low, the extremities begin to grow cold, the lips pale, or the patient complains of being sick or faint, it must immediately be stopped.

For this purpose, the patient should be set nearly upright, with his head reclining a little, and his legs immersed in water about the warmth of new milk. His hands ought likewise to be put in lukewarm water, and his garters may be tied tighter than usual. Ligatures may be applied to the arms, about the place where they are usually made for bleeding, and with nearly the same degree of tightness. These must be gradually slackened as the blood begins to stop, and removed entirely as soon as it gives over.

Sometimes dry lint put up the nostrils will stop the bleeding. When this does not succeed, dossils of lint, dipped in strong spirits of wine, may be put up the nostrils; or, if that cannot be had, they may be dipped in brandy. From ten to twenty drops of the oil of turpentine in a little water, given frequently, seldom fails to stop a bleeding from the nose, or any other part. If the genitals be immersed for some time in cold water, it will generally stop a bleeding at the nose. I have not known this fail. Or cloths dipped in cold water may be applied to these parts.

Sometimes, when the bleeding is stopped outwardly, it continues inwardly. This is very troublesome, and requires particular attention, as the patient is apt to be suffocated with the blood, especially if he falls asleep, which he is very ready to do after losing a great quantity of blood.

When the patient is in danger of suffocation from the blood getting into his throat, the passages may be stopped by drawing threads up

the nostrils, and bringing them out at the mouth, then fastening pieces of sponge or small rolls of linen cloth to their extremities; after drawing them back, and tying them on the outside with a sufficient degree of tightness.

After the bleeding is stopped, the patient ought to be kept as easy and quiet as possible. He should not pick his nose, nor take away the tents or clotted blood till they fall off of their own accord, and should not lie with his head low.

Those who are affected with frequent bleeding at the nose, ought to bathe their feet often in warm water, and keep them warm and dry. They ought to wear nothing tight about their necks, to keep their body as much in an erect posture as possible, and never to view any object obliquely.

FAMILY RECIPES.

INJECTIONS TO OPEN THE BOWELS.

TAKE of thin gruel one pint; common salt one tablespoonful. Mix them together.

Take of thin gruel one pint; Glauber's salts one ounce; hog's lard half an ounce. Mix.

Take of Epsom salts one ounce and a half; linseed oil two tablespoonsful; warm water one pint. Mix.

FOR BURNS AND SCALDS.

Take of lime water and linseed oil equal parts, and shake well together. This will be found a useful domestic remedy in scalds and burns, to be applied constantly by pieces of linen rag dipped in it, having, for the first eight hours after the accident, first dressed them with hot spirits of *turpentine*.

POULTICE FOR ULCERS.

Take of carrots any quantity, boil them till soft, then mash them. This will be found a useful poultice to foul ulcers, and is well calculated to restore them to a healthy appearance.

CRAMP OF THE STOMACH.

THIS disease often seizes people suddenly, is very dangerous, and require immediate assistance. It is most incident to persons in the decline of life, especially the nervous, gouty, hysteric, and hypochondriac.

If the patient has any inclination to vomit, he ought to take some draughts of warm water, or weak camomile-tea, to cleanse his stomach. After this, if he has been costive, a laxative clyster may be given. He ought then to take laudanum. The best way of adminis-

tering it is in a clyster. Sixty or seventy drops of tincture of opium may be given in a clyster of warm water.

If the pain and cramps return with great violence, after the effects of the anodyne clyster are over, another, with an equal or larger quantity of opium, may be given; and every four or five hours a bolus, with ten or twelve grains of musk, and half-a-drachm of the Venice treacle.

In the meantime, the stomach ought to be fomented with cloths dipped in warm water; or bladders filled with warm milk and water should be constantly applied to it. The anodyne balsam may also be rubbed on the part affected; and an anti-hysteric plaster worn upon it for some time after the cramps are removed, to prevent their return.

In very violent and lasting pains of the stomach, some blood ought to be let, unless the weakness of the patient forbids it. When the pain or cramps proceed from a suppression of the menses, bleeding is of use, and the patient may take asafœtida fifteen grains, camphor five grains, opiate confection one scruple, syrup sufficient to make a bolus; to be taken every four or six hours. If they be owing to the gout, recourse must be had to spirits, or some of the warm cordial waters; or give fifteen to thirty drops of the succinated spirit of ammonia in peppermint-water. Blistering-plasters ought likewise in this case to be applied to the ankles. Violent cramps and pains of the stomach have been often removed by covering it with a large plaster of Venice treacle.

CLOTHING.

BY DR. FLETCHER.

(Continued from our last.)

STURDY as were the habits of these men, they used the muscles of the legs but little, as a great part of the active portion of their lives was spent on horseback. In them, therefore, as we see in grooms and postilions, the legs became small in proportion to the other limbs, for in nature's laws there are no clauses of exception on behalf of the privileged classes. The extraordinary exertion of the other muscles, required to support the weight of the defensive armour, and, under such incumbrance, to wield their offensive weapons with the dexterity and power for which they were so famous, would tend still more to diminish the size of the limbs which remained comparatively quiescent. This would be a natural result of the demand for such a supply of blood to support the extraordinary action of the upper limbs, as, from an established law of nature, would cause a somewhat deficient supply to other parts of the body. I have dwelt on this fact, as I think it peculiarly calculated to impress on my readers, a most important rule, in the arrangement and form of their dress.

The hat should not be heavy; a rule to which attention is of late paid, but the forms of its ever-changing fashion are generally very absurd. The height of the crown renders it inconvenient from the liability to be blown or knocked off, and, what is more within my province to notice, the narrow brim affords no protection to the eyes from the sun, and is formed as if it were intended as a gutter to collect the rain in wet weather, and pour it down the back; the tailors having, with a nice sense of the fitness of things, adapted the present form of the coat collar to receive it.

In the female dress the upper garments are attached to, and supported by, the stays; and it is this part of the dress by which incalculable mischief is produced, when fashion, as is now the case, occasions them to be laced tight for the purpose of rendering the waist slender. We laugh at the Chinese ladies for using, from early childhood, shoes so small, as to reduce the size of the feet, in a degree which renders them almost useless, while, by the fashion of our own country, women of nearly every rank, but more especially of the classes which take credit to themselves for superior knowledge and intelligence, do that which not merely, as in the case of the Chinese ladies, produces an inconvenient deformity, but which interferes with the action, and even alters the structure of organs by which the most important vital functions are performed. Why a waist of a span in circumference should have come to be considered necessary to the perfection of the female form, is as difficult to understand, as why no waist at all, or why a hump back should, at different periods, have been held essential to grace and beauty. But it appears so hopeless a task to oppose the dictates of correct taste to the tyranny of fashion, that I shall confine my remarks to that which is the proper object of a work of this kind, an exposition of the injury which is done to the health by the pernicious practice of tight lacing. Not many years ago, it was considered as one of the absurdities which the increasing knowledge of the age had put down for ever.

The cavity of the chest, which contains the lungs, the heart, and other important parts, is formed by the spine, the ribs, and the muscles attached to them. It is of a conical or sugar-loaf form, widest at the bottom. The ribs are connected with the spine by joints, which are moveable to some extent. Their opposite ends are composed of cartilage, or gristle, by which the seven upper ones are united to the breast bone. The remaining five growing successively shorter, leave in front a triangular space, which is filled up by the muscles of the belly. In consequence of this arrangement the ribs admit of a considerable range of motion; and by the action of certain muscles they are alternately raised and depressed, like a bellows, so as to draw in, and expel the air, in the act of respiration.

A broad, deep chest is well known to be a most important characteristic of a strong and athletic frame. The chest is consequently larger in men who are destined to fulfil the more active

and toilsome duties of life, than in the other sex; and in the strongest and most robust men it is largest. The consequence of the chest, whether from the original formation, or from some improper habit, not having its due capacity, is, that the individual is what is commonly called short winded. When he has used active muscular exertion for some time, he begins to breathe rapidly, and the pulsations of the heart increase in frequency and violence. This is an effort of nature to keep up the supply of oxygenated blood required to support the action of the muscles. The chest not having a sufficient capacity to allow of an adequate quantity of air being drawn in at each inspiration, the frequency of these inspirations is increased to make up the deficiency. The change which is effected in the blood being, for the same reason, imperfectly performed, the heart acts more violently in order to send an increased quantity to the muscles which are in action. But if this undue action be frequently repeated, a permanently disordered action, and probably organic disease of the heart is produced; or the lungs become diseased, in consequence of the circulation being obstructed from the want of a proper degree of expansion of their structure, and of the increased quantity of blood with which their vessels are loaded.

Hence the importance of those modes of exercise, which have been recommended for the purpose of opening the chest, that is, of giving by free, and often repeated action, both of the muscles of respiration, and those attached to the ribs and arms, an habitual and permanent expansion to the chest.

But the effect of tight lacing is to compress, and to render almost immoveable, the lower or short ribs, which have naturally the widest range of motion, so that the chest is converted from a conical to an oval figure. If the practice be long continued the deformity becomes permanent; and the degree in which it often exists, would be almost incredible to those who have not witnessed the specimens of distortion which are met with in the dissecting room. It is a matter of surprise how those who have thus tampered with organs so essential to life, can even, for a few years, have continued to exist.

Young ladies who have their ribs thus braced down, are often set to use dumb-bells, shuttlecock, or whatever may be the fashionable exercise of the day, in order to expand them. It would be as rational to make a man run a race in shackles. The exercise is, indeed, if vigorously pursued, more likely to prove hurtful than beneficial, by causing undue action of the heart, and oppressing the lungs, in the manner just described; and thus consumption, and diseases of the heart, are, in many cases, produced.

(*To be concluded in our next.*)

SHORT MAXIMS FOR HEALTH.

Eat no suppers, or at least let them be light; half a dozen oysters, or a cup of sago and wine, are the best.

Brush the mouth and teeth well every morning, with a tooth-brush and cold water. It would be well to do the same at night.

Never allow the stomach to remain too long without food, nor stop he sensation of hunger by drink.

If employed in study, always make an hour or two subservient to pleasure, and exercise in the open air.

Do not walk to fatigue, for that debilitates very much.

Dancing is a most wholesome exercise both for the mind and body, but avoid excess in it.

Nuts of all kinds are unwholesome.

Always keep the feet from wet.

Never put on linen that is not well aired.

Beware of damp beds; for these are destructive.

YELLOW FEVERS AND CONTAGION.

It may be interesting to our readers at a period when contagion from the yellow fever is dreaded, to give Professor John Lizzar's opinion on that subject. We extract it from the notes we took in his lecture room :—Gentlemen,—It seems evident that cold is the cause of fever, because no other agent operates so extensively upon man, and all other reputed causes are open to strong objections. Fever is produced by cold being applied to the skin, when, or after, it has been overheated. The consequence is an increased action of the nervous and sanguiferous system, both of them being co-extensive with the skin itself. The cold application drives the blood inwards, and a determination ensues towards the brain, lungs, and other important organs. The nervous and sanguiferous systems striving to relieve themselves, heat is evolved, and all the phenomena of fever developed.

Now, as to the reputed causes of fever :—Marsh miasma is one of them. It must be a mere phantom of the brain, for is it probable that it can travel, as it is asserted like a parcel of goods, or a carrier pigeon, from the sluices of Holland, from the marshes of the Tiber, or the Campagnia of Rome, to the lanes and alleys of London? Besides there are many of the fevers reported to originate solely from this cause, which attack people entirely removed from its influence, as for instance, it has been observed in the middle of the Atlantic Ocean. Above all it has been observed in India, that when fever rages with the most deadly violence in August and September, the rivers are swelled, and the vast volume of water fresh, so that the flood tide is hardly perceptible at Calcutta. In May and June, on

the other hand when the streams are shrunk within their banks, when the heat is excessive and the tides running rapidly at the rate of 20 miles an hour, leaving, as they retire, a broad ditch of mud covered with putrid carcases and decomposing vegetables, emitting the most abominable exhalations, no deleterious effects are observable, and not a vestige of fever remains.

The evils arising from human effluvia are equally delusive. The wretched beings crammed together in a slave ship, had no case of yellow fever amongst them, and Dr. Trotter, asserts that contagious diseases were not prevalent amongst them. Again, although a church-yard was laid open at Paris, and the decaying matter, evolved the most offensive odour, no fever resulted. Howard, the philanthropist found no fever at Smyrna, after the exposure of bodies in the street, the stench arising from which, was such, that the people dare not open their windows. He says we must look to other sources, than filth or effluvia for the cause of fever. In regard to contagion that also appears to be an illusion. The French Surgeons, with unexampled courage, put on the clothes of their patients who died of yellow fever, occupied their beds, during three days, with impunity and one of them in particular, actually swallowed the black vomit, without experiencing any injury. It is my opinion, gentlemen, this exposure to filthy exhalations, fatigue, and fear, render men only predisposed to fever. Fear is perhaps the most powerful of the three, and I will give you an instance. A French servant had a trifling operation performed upon him in the infirmary, and through the effect of terror, he imagined he would die. No one could make him believe otherwise. He lingered on, and ultimately died a pure victim to fear. We had some painful instances of the operation of that passion during the visitation of the cholera. Diseases, however trifling, were ascribed to cholera, and patients of all kinds, indiscriminately hurried off to the Hospital. Matters were even carried so far that many unfortunate persons were consigned to their graves alive.

PHARMACY.

POULTICES.

In Inflammation of the Eyes.—Alum one scruple, conserve of roses one ounce and a half, beat up with the yolk of an egg.

Poultice in Gangrene and Fetid Ulcers.—Linseed half a pound, prepared charcoal two ounces, hot water, enough to bring them to a proper consistence.

Poultice in Open Cancer.—Boil two handfuls of hemlock leaves in a pint of water, then strain, and add linseed or oatmeal to thicken.

Carrot Poultice.—Boil half a pound of carrots in a sufficient quantity of water, until they become soft, extract the juice and beat them into a pulp and make a poultice, adding the juice again; for scorbutic ulcers, or foul cancerous sores.

Linseed Meal Poultice.—Hot water and linseed meal, equal parts, smear the surface with oil or hog's-lard before applied, to promote suppuration. Also crumbs of bread, linseed meal, and hot milk for the same purpose.

Effervescent Poultice.—Wheat flour one pound, fermented yeast half a pint; mix, and expose to a gentle heat until it begins to ferment; applied on gangrenous parts.

Poultice to alleviate Pain.—Soak bread in a boiling decoction of poppy heads, and apply it.

The bread poultice made with port wine will be found a beneficial application in gangrene.

ANECDOTES.

HAPPY PROFESSIONAL COINCIDENCES.

The faculty of medicine of the United States present some of the happiest coincidences between names and professions.—In the case of a man in Philadelphia who lived thirty-eight hours after a blow on the head, we find the medical witness, Dr. Hartshorn, giving his opinion on the subject. We also find Dr. Beck claiming priority, of inventing a stomach pump, to Dr. Physic; and every one knows that there is a Dr. Rhubarb, of the same trans-atlantic fraternity.

INJECTING BODIES WITH WHISKEY.

Dr. Godman, of Philadelphia, who no doubt, like many of his professional brethren, loves a "drop of the *cratur*," has used common whiskey, in injections, in preference to saline or acid solutions. The experiment, we conceive, must have been first tried on the living subject. This injection, Dr. G. avers, answers all the purposes of the others, and is free from the objection of rusting the knives while dissecting the subject.

DOCTORING A NOBLE.

A French nobleman, while travelling through Switzerland, was suddenly taken ill, and sent for the most celebrated physician of the place to attend him. While the doctor was examining the patient, the patient was puzzling his brains about the doctor, whose appearance he seemed perfectly familiar with, although he could not remember ever having seen him before. On asking Esculapius where he could have met with him, the peer was surprised to find his doctor had once been his groom, and had given up attending to horses, in order to attend to the sick. All that noble conceived to be difficult, the groom-doctor described as most easy, by saying it was only necessary to make people believe he was a wonderful man, and it would be much more wonderful if he did not get plenty to do. By these means, he had succeeded in making the best practice in the place, and only required for its continuance, that no one should know he had been a groom.

TO CORRESPONDENTS.

T. I. G. Y. Hulme.—We don't think it is gravel at all, but simply the system generally disordered, especially the digestive organs, with which the kidneys sympathise. Do as we have directed.

Solon, Manchester.—Bullets sometimes remain in the body during a man's life. But when internal are very apt to wander about, causing much uneasiness to the patient. Have the pellet by all means extracted if it is so near the surface, especially if it is at the back of the neck.

J. D. P., Manchester.—If that is all he complains of, he need not be under any alarm. Take a little opening medicine, say salts and cream of tartar. Procure some golden ointment, and rub night and morning the parts affected. Write again if the sores do not disappear.

S. E., Adelphi Street, Preston.—From the symptoms, we feel inclined to think that the spine must be affected; but there is a very important thing to be considered, in regard to long standing pains in the back. An abscess may be forming, which will point in the groin very like a hernia. If there is an abscess, it would show itself by a tumour in the place which we have mentioned. If the liver is affected, you would soon show that in your face. If the kidneys, the urine would show it. Our opinion, supposing there is no tumour, is decidedly that the spine is affected. You say you feel relief from rubbing. Try the following, soap liniment one ounce, hartshorn one ounce—mix—rub in night and morning before the fire, and be sure to wear flannel always. Write again about the presence or absence of the tumour, and we will prescribe further.

Error, Manchester.—And a confounded stupid error you have made, to take corrosive sublimate, to dry up an old standing discharge, and to leave the constitution to battle with the mischief—no wonder you cannot work, you are a lucky fellow to be alive at all. No old standing discharge can with impunity be dried up, the head, stomach, lungs, &c., are sure to be affected. You have got it in the head. Well, your duty now is to get the bowels opened, and kept well open twice a week. To drink infusion of sarsaparilla, and to expose yourself to the cold breeze as often as you can. If you look to the bowels and set up a natural discharge, then you will get quit of your ulcer, and your present disagreeable symptoms. Did you doctor yourself? whoever prescribed such medicine, *ought* to be drummed out of the town.

John Thomas, Aldgate.—The phlegm arises from a deranged state of the stomach, because, had the evil rested with the lungs, the moment he began singing, he would be stopped with coughing. If he chooses, we can send him some medicine. Tartaric acid, acid drops, or cayenne lozenges, are very good for clearing the throat, but we have said, that according to his own statement the mischief does not seem to be in the air passages at all, but in the stomach and œsophagas, or passage for the food.

M. S. S., Portia.—It is impossible for us to say upon what grounds the Dr. said his heart would ossify, because he had a fall which injured the spine, and subsequently intermittent fever. Actors, preachers, speakers, who affect or feel violent emotions, are the people most like to have ossification of the heart—old age naturally brings it on, but why a blow on the back should ossify a man's heart is certainly beyond our comprehension, nor can we see any connexion between them whatever. The affection he complains of results from great debility and loss of blood. It is a simple palpitation of the heart arising from constitutional weakness and long suffering. It is sympathetic in our opinion alone, nor do we believe there can be so soon any chronic affection of that formidable nature. The way to cure it is to strengthen the constitution by every means. Wine and bark will answer very well as a tonic—sponging the body with vinegar and water, and wearing flannel, and progressing to shower-baths will be a great advantage, and exercise in the open air, above all things regularity in diet. Keeping the bowels regular, but without any strong physic, and a gentle nurse will, we think, soon set him on his legs.

H. C.—The cause is the 12 hours sewing. That must be broken into by rest or exercise, as no medicine can cure although it may relieve her. If she desires it, she can try a box of pills of our own compounding, but which certainly do not possess the unbounded qualities of Holloway's Cure-all, which ought to extirpate disease from society, if all he promises could be effected. Quackery will do her no good. The whole of her complaint springs from the stomach; and that is deranged for want of proper exercise. The last is by far the best physic.

J. P. L.—Send eight stamps, and he shall have some medicine. Continue in other respects the same treatment.

Tato.—The ammonia used in the paste which she rolls no doubt cause the chapped hands, and will account for the feet being affected too. The best thing she can do, is to purchase some liquid chloride of lime, say two ounces. As often as she can conveniently, but especially after kneading or rolling put a teaspoonful of the lime into a little cold water, and wash her hands. Every night rub over the sores some ointment made of golden ointment one ounce, blue ointment half a drachm. Wear gloves in bed. The number of doctors and apothecaries in England can be best ascertained by reference to the census. We have not time to look at it. They are more than 100,000 strong, and compose an army far superior to that of Napoleon, for they know how to *charge* better.

John Butterworth, Rochdale.—Cut the hair short, and cut it every week. Rub the yolks of eggs well into the roots after the first cutting, and wash them out with lukewarm water in which a piece of washing soda about the size of a nut has been thrown; after that, procure a little pomatum and a hard brush, and rub away, night and morning, for 15 minutes—that will stimulate the skin, and the cutting will strengthen the hair. Time will do the rest and nature, for she must be the doctor.

Verticle.—Points out the cause of his weakness himself—abstain—take a warm bath frequently, then cold or tepid baths. Keep the bowels regular, and take abundant exercise. The case is in his own hands, not ours.

John Stood, Rochdale.—The drinking did the mischief; avoid it again. Send 8 stamps, and, if he takes care of his stomach, we will set it to rights for him.

X. Y. Z., Dukinfield.—Try a blister; also take one of the following pills every second night for 12 nights—pil. hydrg. 3 gr. ext. colocynth 3 gr. mix.—6 doses.

A. B. Ditto.—Mucilage one ounce, syrup squills three drachms, syrup of buckthorn half an ounce juice of a lemon, camphorated water to make an 8-ounce mixture. Dose one teaspoonful, when cough is troublesome.

Constant Sufferer, Newcastle.—12 stamps.

Samuel Hope, Peckham, Surry.—We do not understand what he means as he does not describe one single symptom of the disease he supposes it to be. He had better write again and say positively what is the matter with him. If there is nothing more to state than has been done in his last, we see no occasion for alarm. He may soon be well.

To the News Agents and Readers.—Many of the numbers of the FAMILY DOCTOR being out of print, and not to be had except in the parts we have resolved to bring the first volume to a close with our 26th number; after which we shall begin a new series. Previous to that time we shall have re-printed the numbers wanting, and any one can have sets complete, or the 1st volume complete with our 26th number. The new series will be still further improved, and rendered worthy the unexpected encouragement we have received. The printer had better be informed of the number of copies required by the agents.

TO CORRESPONDENTS.—We shall consider it a favour if all letters, requiring answers on the Saturday, should be forwarded so as to reach us on Tuesday. We will not answer for their insertion, if they reach us on Wednesday. The correspondence is now in the Printer's hands, and yet we cannot retard the printing and publication, to reply to several letters just arrived.

N.B. Medical Advice will always be given to any person (gratuitously) through the pages of the FAMILY DOCTOR; but it is necessary to give age, sex, employment, symptoms of disease, length of its duration, together with the most probable cause, or at least to describe the commencement of the attack. Any one may have advice through the above medium—viz., *answers to correspondents*, without the necessity of giving their names, or the possibility of their being made known; only, there may be questions which we shall decline answering in our pages, in which cases the patient may correspond with the editor, receiving advice until cured, on payment of 2s. 6d., as a fee, in the outset. In all cases direct to the Editor of the FAMILY DOCTOR, 4, York Cottages, St. Mark's-road, Camberwell New-road, London.

Part 5, of THE FAMILY DOCTOR, *Price 6d., is now ready; and may be ordered from any Bookseller.*

THE

FAMILY DOCTOR.

ILLUSTRATED.

No. 24.] NOVEMBER 15, 1845. [PRICE 1½*d*.

EXERCISE, MUSCULAR AND MENTAL.

THE exercises necessary for adults may be comprised under two heads, muscular and mental. Without exercising both body and mind, according to the intentions of nature, no man or woman can either enjoy the blessings of life, serve themselves, or benefit their fellow beings. Unfortunately, in present society, there are to be found two distinct classes of beings; one class who are overloaded

with mental exertion; another who are bent to the earth through excessive muscular labour. In both instances we witness terrible results. The first class form the depot from which are drawn the maniacs who fill our asylums; the second class supply inmates to our hospitals and poor houses. There seems to be no medium in our social organization; the beam is never balanced; it presses either upon mind or body with uniform intensity, and with overwhelming force. The grand result is, that the industrious are the most severe sufferers, whilst the sloth and sluggard seem to be the most favoured, the most healthy, and the most happy. But that

arises only from unequal comparison, because if our social laws made bodily and mental labour lighter, and regulated both by the unerring laws of nature, then we would find the industrious rise as the slothful descended in the scale of muscular and mental vigour. At all events, nature proves it throughout all her creation, if we compare the habits and powers of natural and domesticated, of wild and of tame animals. There is one great rule that might be observed with advantage, and which would apply to the majority of

those who toil by hand or mind, viz., that the first class should avail themselves of mental exercise, whilst the latter class should adopt muscular exercise as much as is convenient or possible, and as far as the laws of nature will permit. It may be said that it is absurd thus to address people who are chained to their task, but that is the very reason why, and the very time when to expect that greater exertions should be made to remedy the evils of their condition. Great remedies may be applied, and can be effected by government, or as is now being done by the benevolent. These may be enumerated under three heads:—parks and play-grounds, baths, public and private, and ventilation and drainage. All these would contribute much to the public health, and if government did what was right without, families would, from that very example soon learn to do right within their dwellings. The two first divisions would form the basis of our system of exercising the people. There is generally a school-house built before a schoolmaster is sought, and there must likewise be play-grounds before sports can be encouraged, baths before cleanliness can be maintained, and ventilation and drainage before the public health can be protected.

The body of man not only requires to be well exercised, but as the skin is a breathing machine, through whose pores the serous portion of the blood goes off in perspiration, receiving oxygen in return; those pores require to be cleansed and kept clean as much as a man's throat. Bathing, then, as well as running or riding, is absolutely necessary for the maintenance of man's health, and conduces to his muscular vigour. These, however, are general observations, and we make use of them before descending to particulars, because we are afraid in an age of steam and rail that it might be considered old-fashioned and absurd to talk of a man walking five miles in an hour, when he can go that distance by steam in fifteen minutes. Walking, however, is one of the best, if not the best exercise for man. The muscles of the chest, abdomen, spine, legs and arms, are all brought into action; so are the lungs and heart, increasing the circulation, and painting the cheeks like a rose with the blood oxygenated by the fresh breeze. In fact, walking is decidedly the most natural and healthy exercise. Running merely brings the muscles into more rapid action. In both it may be said the lower extremities are more exercised than the upper, and no doubt it is true that men who walk much, like hawkers, &c., and do not use their arms much, exhibit a vast difference in the development of the muscles of the lower and upper extremities. The opposite is noticed in grooms and coachmen, and also in sailors, whose arms are brought into more frequent action. A coachman on his box, and when off, are two very different persons; in the one case, he is seated like a portly alderman; in the other, he is like the same alderman who has stolen a pair of consumptive legs to prop up his robust corporation.

There is one kind of exercise more calculated to develop muscles

than any other, and yet it is less practised by the mass; we allude to military exercises. The marching strengthens the muscles of the legs, the exercise of small arms those of the shoulders, and fencing, those of shoulders, spine, and limbs. In short, we should decidedly say that military exercises combine all that is safe, natural, and important in muscular development. To the weak it offers every chance of strength; to the strong every inducement to become more powerful.

There are stronger muscular exercises, such as cricket, rowing, pitching quoits, football, wrestling, leaping, &c., some of which are, however, not admissable for weak persons, and sometimes produce inconvenient results to strong frames. But we may sum up our opinion in regard to the kinds of exercises, proper and useful for adults, by remarking that not one of the modern gymnastic monkey tricks are at all to be compared with those ancient sports which experience have stamped as the most proper for man.

We shall offer now a few observations for the guidance of those who are confined to uncomfortable and unnatural positions. Those who lean forward on desks had far better stand up and write instead of sitting, or, at all events, exchange frequently during the day the sitting for the standing position, so that the muscles may be alternately brought into action. Tailors, dressmakers, &c., ought to exchange on every opportunity the erect for the stooping attitude, and not wait until the weary muscles inform them. Men who stand much, like printers, should sit in turn; and men who sit much should stand by turns. Men may say We get used to our position; so does nature, and curves your spine for you. All who are confined should resort to exercise; and, indeed, without particularizing, we may say generally, that whatever may be the long-continued attitude or position at work, the opposite should be practised as frequently as possible, and that voluntarily.

1. Bodily or mental exercise should never be prolonged until there is exhaustion. Fatigue is the call to stop.

2. Neither shonld be practised before or after meals, nor late at night.

3. There should be regularity and constancy in both applications.

4. Bodily exercise should not be resorted to when the lungs are diseased, or when afflicted with a severe cold.

5. Mental exercise should never be continued or indulged in when the stomach is disordered, when indigestion is present, or when the system is in any way unusually disturbed.

6. The two exercises should never be combined, such as in reading and walking.

7. No one should ever walk and eat.

8. No one should ever read and eat.

9. No one (always excepting lazy fellows) should, against the inclination, force the body to exercise, or the mind to a task.

10. Bodily and mental exercise should be varied, from moderate to powerful, from gay to grave, and *vice versa.*

Lastly. There is a time for every task, and for each task let there be but one time; as one thing can only be well done, when done by itself.

PRACTICE OF MEDICINE.

INFLAMMATION OF THE PERITONEUM.

The Peritoneum is the membrane which covers the bowels, and an inflammation of that intestinal covering is common with women before and after their confinement. The name given to it is *puerpural fever*, when it appears in the character of an epidemic. It has been considered to be contagious from the fact, that when once it appears in one midwifery case, it has been observed to occur in many, and it often rages in one locality when it is unknown in another. The disease is not confined to or caused by delivery, but may spring from organic affections of the womb, such as cancer, or ulceration, or from injuries, such as wounds in the abdomen or intestines. In severe cases of rupture, inflammation of the peritoneum lining will take place around the part injured. Lastly, cold, suddenly checked perspiration, and the ordinary causes of fever will give rise to it. *Puerpural fever*, however, is generally considered the disease to which women are liable, and one of the very formidable chances to which they are exposed, affording us a powerful reason to watch over them, and nurse them well, and kindly before, during, and after their confinement. This we particularly impress upon all MEN who have the least feeling for their own mothers if they have none for their wives.

The symptoms are greater or less pain in the abdomen, tenderness to the touch, sometimes dry burning skin at other times profuse perspiration. The pulse is generally feeble, but in some instances strong, with flushed face and glistening eyes. In fact, the fever assumes both a strong or acute, and a weak or subacute form. In cases of active inflammation the symptoms are more marked, but there may be inflammation present as has been proved on dissection, whilst the chief characteristic was extreme debility and sinking pulse. The only thing that can account for these phenomena is the varied strength of women, the duration of labour, and the results attending it. In violent cases, occurring with strong robust women, general bleeding is resorted to, but local bleeding with leeches is preferable. Mercury should be given in repeated doses; the Hydrg. c. creta, or calomel and chalk mixture is the best. Smart purgatives should be administered to keep the bowels open. Bags of bran are excellent to assist the bleeding from the leeches, and when applied in the form of poultices will afford considerable relief. Cold has been

recommended, but for obvious reasons ought not to be applied. Blisters may be used with advantage, also mustard plasters to the legs.

In cases on the other hand where there is great debility, you dare not bleed except by leeches. These fomentations, bran poultices and the Hydrg. c. creta must form the chief treatment. In such cases the tenderness will indicate bleeding, whilst should the pulse be feeble, the face anxious, and the look expressing distress and debility, opium will be found to soothe the patient to a considerable degree, and is decidedly preferable to bleeding at the arm.

Thus, there are cases entirely opposite, which require much judgment and care. We have alluded to the active and debilitated cases, but there are so many varieties that we would require to begin with case No. 1 and go on to case 100. We have said enough to show the insidious nature and varied character of this formidable complaint, which requires all the attention of a nurse to avert it, and the utmost sagacity of the medical attendant to treat it.

ON THE USE OF COLD WATER AFFUSION IN POISONING WITH OPIUM AND IN INTOXICATION.

The superior effects of general applications over the use of inward remedies, are exemplified in the decisive results of cold affusion in the high state of fevers, and in cases of over-doses of opium. When the torpor, congestion of brain, and insensibility, have occurred from an excessive dose of opium; when medicines cannot be swallowed (and where if they could would be useless), it is surprising to see how the patient is roused and restored to sense and muscular motion, by dashing the naked body with cold water.

This brings to mind an interesting and instructive case which occurred in my practice four years ago, and called forth a combination of two potent remedies under consideration. It was a case of lock-jaw, in a black man, named Dan, at Plantation Coffee Grove, Essequibo. The disease was violent; and very large doses of opium and camphor were administered, till at length, during my absence, the administration of these remedies was carried to such an extent, as not only to remove all tetanic or lock-jaw symptoms, but also to produce the most deadly insensibility and apoplectic stupor. He was so far exhausted, that the cold affusion produced but a transient effect, although it roused him for a moment from the deepest lethargy. He was then rubbed over smartly with pepper, salt, and lime-juice, which caused no signs of sensation. Again, however, dashing the body with cold water, it had more effect; by repeating the friction, and the cold affusion alternately, he was successively more excited till able to swallow an emetic, which brought up much opium and camphor. He regained his senses, had no recurrence of the spasms, and has since been tolerably healthy.

Mr. Campbell, proprietor of Sparta Estate, will, he says, ever remember so extraordinary a discovery, and has more than once

brought it into my recollection; it bears, however, no comparison with another case, to which I shall refer in the course of this paper.

It is much to be lamented, that the directions we meet with in books, for counteracting the results of excessive doses of opium, refer in general, only to the methods of removing opium from the stomach, whilst no efficient means are proposed for counteracting the deleterious effects of the poison already absorbed into the system. The stomach-pump is certainly an important instrument in those cases, where the torpor and the insensibility which ensue prevent vomiting; but in such cases, unless speedily resorted to, it will seldom prove effectual, although the stomach be completely emptied, instances of which are of frequent occurrence. In a recent medical publication, containing a case related by a learned and doubtless skilful physician, in Edinburgh, a case of the sort is mentioned, in which the stomach was entirely emptied, but the patient expired from the sedative effects of the poison already absorbed. It is not stated whether any means were adopted for this purpose; but cold affusion is not mentioned, either in this case or the general directions.

I may here observe, that the same means have proved equally effectual in restoring persons in the most advanced state of inebriation from excessive drinking of spirituous liquors; and any person suffering in the morning from the effects of inordinate potations, may prove the efficacy of this remedy by causing a pailful of cold water to be dashed over his head and naked body. There can be little doubt (although the trials have not to my knowledge been made) that the same remedy might prove equally successful against the effects of all other narcotic poisons, as well as opium and alcohol, as, when over doses of hemlock, digitalis, hyosciamus, &c., have been taken.—Dr. Hancock.

CLOTHING.

BY DR. FLETCHER.

(*Concluded from our last.*)

This unnatural contraction of the chest is a state of partial suffocation. One of its consequences is to load the brain with imperfectly oxygenated blood. The energy of that important organ, and consequently of the whole nervous system, is by this means depressed. The functions of other important organs are in the same way interfered with. The stomach and liver, too, though not in the cavity of the chest, are within the margin of the ribs, and suffer from direct pressure. The other organs of the belly, in consequence of the pressure upon the upper portion of the cavity, are in their turn compressed; and thus there is not one of the organs engaged in the performance of the vital functions, which has not its actions disturbed

while most of them have their structure injured by this vile practice. I have often heard women assert, that they could not support themselves without the aid of the whalebone, or wooden, splints, by which the injurious pressure of tight stays is aggravated. Where they have been worn for many years, this may be the case. The muscles, which should support the trunk, have become enfeebled by long disuse, till it would require some attention to the proper means of restoring their powers, to dispense with the injurious artificial support which has become habitual. But "God never made his work for man to mend," and if an additional bone had been necessary to keep the body in its proper attitude, it would have been given us.

There is no doubt, that the uneasy pressure of stays is a frequent cause of curvature of the spine, in consequence of girls, unconsciously trying to relieve themselves, by leaning on one side. From the same cause, as well as in consequence of the action of the muscles connected with the shoulder joint being constrained, the shoulders fall forward, and the collar-bone, which ought to be almost perfectly straight, has the form of an italic *S*, presenting an unsightly protuberance. Indeed from errors in dress, and the effect of sedentary habits, it is seldom that this bone is found properly formed. In women of a full habit, and it is they who have the greatest temptation to tight lacing, the countenance becomes bloated in consequence of the obstruction of the circulation.

Let any one unaccustomed to unnatural pressure on the chest, try for a short time the effects produced by forcibly pressing down the lower ribs, and his sensations will convince him of the correctness of the above remarks, as far as they refer to the heart, the lungs, and the brain. Every one who has the most superficial knowledge of the laws of animal life, knows that in other points they are equally correct. It would, indeed, be impossible to describe in language too forcible, the shocking consequences of this absurd and mischievous practice.

It is painful and humiliating to witness the weakness and perversity which subjects the greater part of the community to the caprice of fashion. In this case the consequences are so serious, that one might almost wish for sumptuary laws to put an end to the mischief. The late Emperor of Austria did forbid the use of tight stays in his dominions. Let not those who by their example keep up this monstrous fashion, sneer at the ignorance and errors of the humbler classes, while they themselves have not knowledge and intelligence enough to avoid evils which despotism, in this case benevolent despotism, has stepped in to avert. Another absurdity in female fashion, which has of late been adopted by men, is the wearing of tight shoes. The pain they cause is often so severe, that one might expect no other admonition would be necessary to put an end to the practice. Like every thing else that produces inconvenient pressure, they prevent the free and graceful movements of which the human figure is

capable, and cause a more serious evil by giving rise to the painful excrescences, called corns, which no means can effectually remove, so long as the use of tight shoes is persevered in.

The general rule, then, with regard to dress is, to let it fit loosely, and to have enough of it. It is, in every point of view, more advisable to preserve the heat of the body by good and sufficient clothing, than by keeping the rooms we occupy highly heated, the reasons for which have been already explained.

I have before remarked in general terms, that at certain seasons fevers are of frequent occurrence. Now that I have to point out one of the most effectual means for preventing them, I shall briefly explain the circumstances which give rise to them. Those which are excited by the effluvia of marshy soils, ditches, &c., are found to prevail during the change from wet to dry weather. When flooded with water the noxious matters are so diluted as to cause but little danger, but when the water has nearly evaporated, the effluvia becoming more concentrated, their poisonous quality is of course increased. It is probable, that this atmospheric poison is absorbed from the surface of the skin as well as of the lungs ; and that this is the case, too, with other kinds of atmospheric poison, the nature of which is less understood, but which are found, from time to time, spreading over wide districts, and producing fevers of the most fatal kind.

Whether absorption takes place from the surface of the body is a disputed point. That the skin is furnished with a set of the minute vessels called absorbents, whose function it is to suck up, and convey into the blood, fluids, which come into contact with them, is certain; but there are some who doubt, whether they open on the surface, as in the internal membranes, or are only employed here as they are in all solid parts in removing the wornout structures which, in the ordinary course of the animal economy, are dissolved and carried off, to be replaced by new parts continually formed from the blood. It is the opinion of most physiologists, that there is absorption from the surface, and I entertain no doubt of it. Be that as it may, poisons applied to the skin do certainly produce their specific effect, either by being carried into the system, or by their action on the nerves of the skin; and in either case good clothing must obviously be the best mode of protecting ourselves from the effects of any, that may be floating in the atmosphere; and experience has fully proved that it is so. Where fevers, and other inflammatory diseases arise, as in the great majority of cases they do, from a variable, a damp, or excessively cold atmosphere, it is needless to point out good clothing as the proper means of prevention. The well-fed and well-clothed seldom become the victims of these diseases, which, especially in times of scarcity, carry off such numbers of their less fortunate fellow-creatures.

DIALOGUE WITH SLEEPY HEADS.

SITTING one morning in our library an elderly lady entered, accompanied by a young man and woman, a brother and sister. Motioning them to seats, I addressed the matron.

"Well; what can I do for you?"

"It is'nt me, sir. It is for those young folks there, that I come to consult you."

"Let them describe their symptoms."

"That they 'll never do, Doctor."

"Well, do it for them."

"Why, sir, in the first place, they have lost all appetite in the morning, and sit over their breakfast, picking at it just like sparrows out of a dish, but not half so lively."

"They haven't the cat to be afraid of."

"But they have something worse, Doctor. They have ill health, and God knows what else to dread."

"Let me hear all about it."

"Well, sir: they have no appetite, such as young folks have, or ought to have in the morning. They seem listless, and have lost all colour. There's my daughter, with a short dry cough, as if consumption was knocking at her breast; and that young man is as weak as water; and as delicate both of them are in their stomachs, that I don't know what to give them. They learn less and do less. They would sit over the fire all day long, and as sensitive to cold as a barometer. That young man must dress at the fire; and my daughter won't wash except in luke warm water. I told her her skin would get chapped, and——"

"Well, my good lady," interrupted I, "let me ask you a few questions. You say they don't eat, of course, so young, they cannot drink."

"Oh! dear, no: but that boy has as little appetite in the morning as any toper in our village."

"Well, most young people injure their health, by over eating or by over exercise."

"It is neither, Doctor."

"Or over study."

"Study, indeed! If they study anything, it is their bed."

"Oh! ho! that's it, is it. I see—" and looking on the tallow-candle, flabby-looking countenance of the two delinquents, they held down their heads; whilst more blood flowed into their faces than had been there for a considerable period.

"Aye, aye,—the bed: well, I was about to add over-sleeping, and that is bad enough; no wonder they are in the very threshold of disease, wavering between health and suffering. A little more indulgence, and organic disease would have set in, either on the brain, stomach, or lungs. How long can they sleep?"

"Can. They could sleep, I do believe, till doomsday! There is no getting them up, until their father comes with a horsewhip."

"That medicine will not do. We must administer some jalap, before bed time. It is necessary as a stimulant, and should it not act, a pail of cold spring water over each, will increase its action."

"Well, Doctor, do you think I had better do so. Is the over-sleeping the cause of their loss of health?"

"Undoubtedly: and I will convince you. During sleep, there is no question as to the determination of blood to the head. That is a tide, which nature sets up to ebb and flow, if I may make use of a comparison, when you lie down or get up; but she does not approve of there always being high tide—she does not like the horizontal position too long, because there is no proper circulation of her fluids. If continued too long, the brain becomes oppressed, and the more oppressed, the greater inclination to sleep, which would go on until congestion, apoplexy, or death ensued. I have always observed confirmed tipplers, to be early risers. They dare not risk congestion of the brain; and seek the upright position, the air, and a dram to stimulate the craving stomach once more. Too much sleep confuses the brain, stupifies the mind, and deranges the stomach and liver, whilst the vitiated air of the bed-room, breathed and re-breathed, renders the blood bad and unserviceable; so that you see, my good lady, if you encourage these sleepy heads, you must expect the sallow complexion, the stupid head, the sickly stomach, and the diseased body. Save them for themselves, and make use of the morning air and inspiring breeze, which nature made for refreshment, and which all creation seems to usher in with a song of praise."

"I will. I'll rouse them to-morrow, Doctor. Give me a dose of jalap."

"There it is; and a strong one."

"Oh! dear, oh! dear," cried the sleepy heads. "We'll promise to get up."

"Oh; I won't trust you," said the mother. If the Doctor cannot reason you into it, it is my duty to make you do it, and you know I will." [*Exeunt omnes.*

GUNSHOT WOUNDS.

Must always be considered an important part of surgery in naval and military practice, and as they differ from every other kind of wound, so the treatment varies, and our diagnosis is different and obscure. They differ from an ordinary contused wound in as far as the velocity of the missile is concerned. The wound a ball makes at its entrance, differs from what may be perceived at the part from which it has emerged from the body. By this means we are enabled

to decide with moderate certainty whether one or more balls are lodged in any part of the system. The first wound is small and round, the second rugged and everted. In our examination we must not be astonished or deceived by the distant separation of the two holes, or the circuit the ball may have taken before it makes its exit from the body, as remarkable cases are on record where a ball entering at one shoulder, traversed the back, and ran down the opposite arm. Nor are we always to expect to find some part of the dress carried into the wound by the missile, because a ball flying with great velocity seldom produces such a complication.

We may take the calf of the leg to elucidate the subject of gunshot wounds. If, then, we find a round indentation, and a rugged everted wound, we may be certain that the ball has perforated that part of the limb, and in this simple case of wound, our plan of treatment should be as follows. Place the patient in the horizontal position, poultice and elevate the limb. We will always find the wound suppurating, as it seldom heals by the first intention, except in the centre of the tube, or at the entrance of the wound. In this case we may have little or no bleeding, the smaller vessels being sealed up and contused. Guthrie considers the wound will inflame, and next suppurate, and the inflammation be in excess, still he condemns warm applications.

As the wound granulates, apply gradually cold washes, the sulph. zinci lotion, and bandage gently. Attend to the state of the bowels, and regulate the diet. In this simple case of wound, the injury is local, but we can easily imagine that general symptoms may be present, and constitutional remedies requisite. When the clothes may be carried in before a spent ball, it is better not to pull them all out at once, but wait till the excitement has subsided; nor should we probe the wound too much. We must always be watchful of secondary bleeding, but more frequently we have primary. Should an artery have been injured, me must cut down, and put a ligature on, both above and below. Should there be hemorrhage from small vessels, cold water, astringent lotions, and plugging with lint, will generally be successful. When the phalages of the fingers and toes are injured, it is necessary to amputate them without interfering with the hand or foot. In accidents with machinery, it is different, as the shattered and torn condition of the parts then render it necessary to remove the hand. In gunshot wounds there is a clean cut. If the bones of the leg are splintered, we then must consider the propriety of amputating; at least, we must remove the spiculæ. If it be the tibia or fibula, we had better amputate.

In gunshot wounds, secondary amputation is generally fatal. Should the ball run under the integuments, or any fascio, we must leech, foment, and incise; when it passes through a joint, such local and general disturbance is excited, that amputation is required. The concussion in this case, is great, the patient's countenance is pale and anxious; there is a cold, clammy perspiration, the pulse is

feeble and sinking, and acute pain is felt in the wound. If there is much hemorrhage from a wounded vessel, the voice is faltering and feeble, and the patient sinks under it; the stomach may become irritable, and the intellect wavers. If, on the other hand, the patient is recovering from the shock, we have increasing warmth in the wound and on the skin, the pulse improves, and the patient complains of thirst. When a musket bullet is arrested in the body, we should interrogate the patient concerning his position when he received it, and should we conceive it situated near some important vessel or organ, we should proceed to extract it. In general they cause no irritation at first, and should they become fixed in the back, they form an cyst from the surrounding muscles. If next the perionteur of the bone, then a bony cyst is generated; at other times they excite great irritation in the muscles, or end in caries and ulceration of the bone, and torment the patient by wandering up and down different parts of his body. When we proceed to extract these foreign bodies, concerning which so much discussion has existed, we should do so with the ordinary forceps, probing with the finger; unless they are very deeply situated, we ought never to enlarge gun-shot wounds or leave in tents or setons, and for this practice we are indebted to Wiseman.

Wounds inflicted by large shot differ only from those produced by smaller missiles in the greater contusion, laceration of parts, and the general constitutional disturbance. The symptoms are the same, only more aggravated; there is the cold and clammy sweat, the great prostration of strength, the pallid countenance, the feeble pulse, and the great pain in the wound.

We may now proceed to the consideration of amputating, under the circumstances already stated. Concerning the propriety of amputating, and the time the operation ought to be performed. Much and needless discussion has prevailed; we should in every case be regulated much by the severity and extent of the local injury, and the amount of constitutional disturbance. If the limb is extensively lacerated, we should instantly amputate; if not, and should much blood have been lost, we should wait until the constitution rallies. There seems in all gun-shot wounds, whether they are inflicted by large or small canister, or grape-shot, to exist a considerable degree of nervous disturbance; and in the case of the Duke of Montebello, who was wounded in both knees by a musket bullet, the brain, on dissection, was found to present all the evidences of having been concussed.

We may now direct our attention to the evidence concerning the propriety of resorting to primary or secondary amputation. Primary amputation was practised by Wiseman, by the French and American surgeons, with the most marked success. Some surgeons, in cases of peculiar constitutional depression, have given a stimulant, and operated afterwards. At the cannonade of Algiers the surgeons operated instantly after the wound, and with the best results.

Wounds and contusions are produced by what is termed the wind of a ball, which depends on the missile passing so close to any particular part as to produce a nervous concussion. The violence of the symptoms depend a good deal on the part which has been struck. Death was produced in one case by the contusion being situated on the pit of the stomach, and all the symptoms of concussion of the brain were exhibited in a soldier, the tail of whose wig was carried off by a cannon-ball, the curious and inexplicable feature of the case being, that no scratch or contusion was observable on the nape of the neck. Wounds from grape, shell, or canister shot, produce more severe injury of the parts, and from the lacerated condition of the soft parts, tetanus or lock-jaw is liable to occur.

PHARMACY.

FOMENTATIONS.

Hemlock Fomentation.—Boil half a pound of the fresh leaves of hemlock, or three ounces of the dried herb in a quart of water, for half an hour, and strain.

Poppy Fomentation.—The capsules and seeds of poppy heads two ounces, distilled water three pints, cut the capsule of the poppy into three slices; bruise these and the seeds, afterwards boil in the water to one pint and strain.

Camomile Fomentation.—Camomile flowers half an ounce, seed of sweet fennel two drachms, distilled water one pint, boil for ten minutes and strain.

GARGLES.

Gargle in Thrush.—Borax finely powdered two drachms, honey one ounce, rose water seven ounces.

Gargle in Inflammatory Sore-Throat.—Nitre two drachms, honey half an ounce, rose water six ounces, used frequently; also spirit of salt twenty drops, honey one ounce, water four ounces.

Gargle for Venereal Ulcers in the throat.—Corrosive sublimate three grains, distilled water one pint.

Myrrh Gargle.—Infusion of roses seven ounces and a half, tincture of myrrh; mildly astringent and cleansing.

Rose Gargle.—Infusion of roses four ounces, honey of roses, or syrup of mulberries one ounce; this is a simple and elegant gargle for common purposes.

PHYSIC AND THE IMAGINATION.

When a gourmand, named Gourville, was taken ill in Paris, he sent a confidential messenger to the School of Medicine one day when an assembly of doctors was to take place, with instructions to bring with him the one whose complexion was most like his own. Such a one was brought, and Gourville recovered —— *in consequence.*

TO CORRESPONDENTS.

Charles Mills.—It is impossible to do anything like justice to his case in our columns; he ought to correspond privately. What is the use of half an advice?—for we cannot, in the FAMILY DOCTOR, nor will we enter into these cases fully.

G. T., Rochdale.—Tincture of digitalis, three drachms, tincture of valerian, four drachms, sweet spirits of nitre, four drachms, camphorated mixture, as much as will make eight ounces, mix. Dose, a small tablespoonful, night and morning. Send eight stamps, and let us know the result. He does not say when the fright occurred, otherwise we could answer his question as to disease of the heart more positively.

Samuel Hope, Peckham, Surry,—Must communicate privately.

One of Pharoah's Lean Kine.—The warm bath should be used at once, flannel worn, and if the pain does not yield, be cupped. Take the two following pills every second night. Camphor, five grains, ext. hyoscium, one grain and a half, confection of roses, as much as will make a mass; divide into two pills. Dose vi. Also procure the following mixture:—Liquor potassæ, three drachms, spirit æther nitros, three drachms: mist. camph. to eight ounces, make into a mixture. A tablespoonful night and morning. Drink bland fluids, such as barley water and linseed tea, &c.

W. D., Chelsea.—The diet should be vegetable. The boy should be allowed to eat apples, lemons, &c. Cider will answer for a drink, or water soured with tartaric acid. We would advise you to procure half an ounce of muriatic acid; add it to a quart of spring water, and bathe each sore night and morning with it, confining the lotion only to the part affected. After the application of the lotion, rub in some golden ointment. The bowels must be strictly attended to, and not allowed to be costive.

Caleb Quotem.—Describes the stomach out of order so well by describing his own symptoms, that we do not require him to add anything to the statement. We can send him some medicine to set him right, if he forwards eight stamps. The voice can only be strengthened by practice. Sound is produced by a mechanical arrangement in the throat; the lungs, of course, have the principal part to perform; practice, therefore, well regulated, can alone strengthen the voice in singing. As to clearing the throat, cayenne lozenges, acid drops, or tartaric acid will do that. A ball of saltpetre has been recommended, but we always fear its effects upon the kidneys.

H—n R—n., Macclesfield. — Tell us where the abscess is situated on the back, and then we may be able to speak positively. How do you know it is an abscess? we are no conjurors, and cannot guess.

E. W. and W. M.—No wonder these symptoms exist when the person is so costive. Let her take a pill occasionally, composed as follows: Ext. colocynth. 3-gr. gamboge half-gr. aloes 2-gr. m. f. pilula dose vi. Above all she should accustom herself to be regular in her bowels; it only requires perseverance. A clyster of gruel and salt would probably answer best when the headache is severe.

M. D. R. Skene.—Let her take 4-gr. of ext. of colocynth every second night for a week. She ought to put her feet in warm water at bed-time. Give her 20 drops of tincture of valerian every day at noon in a little port wine. She ought not to stand so much, at least for a time, until these symptoms disappear, as she may meet with an accident.

W. S., Little Bolton.—Instead of camomile tea in the morning take a cup of coffee or milk, with a single morsel of bread. Don't smoke until after breakfast. Give up the toasted cheese at supper and take an egg, or something very light. The diet, &c. will do very well. Procure some gentian root, say one ounce, cut it small and pour over it a pint of boiling water. Let it stand all night covered up. Pour off into a bottle, add three drachms of sweet spirits of nitre, and half an ounce of tincture of columba.—Dose.—A tablespoonful every day at noon. Send 8 stamps for the other medicine. Our machine tenter was cured of the same affection the other day.

D. S., Hill Top.—It is very difficult to prescribe for such complaints without seeing them. Spectacles certainly would be advisable. All you have to do is, to go to a respectable maker, tell him what you want, and he will fit a pair proper for you. Try several until you are satisfied.

R. B. S., Aberdeen.—We cannot undertake his case in these pages, as we could not do justice to it, being bound down to introduce no subject likely to be offensive to others. He can be addressed privately, under the same initials, to the Post-office.

O. G.—It is a common result of burns to cause deformity by the cicatrix, or scar of the wound contracting; many plans have been adopted, such as splints, without avail. The wound in burns heal, and then contraction ensues. We do not know anything that can be done until the contraction does take place, when the stricture must be cut across, and a flap of healthy skin applied just as if a new nose was formed.

Jolly Nose.—Being employed in ale and porter stores must expect to look particularly jolly, if he indulges in draughts both long and deep, which we suppose to be the case. He must become tee-total, or the sign of the jolly nose will assuredly still shine in all its glory, exciting that peculiar attention on the part of the public, which such a very suspicious-looking symbol always creates. As for the sores in the head, rub in golden ointment night and morning, and bathe occasionally with laudanum. Be sure to open the bowels first.

Q in the Corner.—If nature does not supply a head of hair, whiskers, and moustachios, we cannot. The hair will curl if first wet and then put into paper, but we are not of the class of barber surgeons. See Butterworth, Rochdale, last number. That is our province.

Douglas, John Street.—Read our article on Rheumatism, No. 7.—Two assafœtida pills every second night at bed-time will relieve him.

Flys, Not. Rutherglen.—The same answer as *R. B. S., Aberdeen.*

L. L., Leeds.—Here is another victim to overwork. When will science and philosophy be heard in their humane warnings? This man it seems has been in a factory working since he was seven years of age. He is now thirty-one. He leaves home at a quarter before five o'clock, and returns at eight o'clock at night. He is on his legs all that time, viz., fifteen hours and a quarter, excepting forty minutes. Well, he has had an inflammation, and of course, the debilitated frame shows signs of weakness in swelled legs—of course it would. Now he must be cured, and so he might but the fourteen hours and a half standing are prodigious odds against our advice. However, we must make the best of (and it is with deep regret we say it) a bad case. The salt and water cold will not do. The water must be quite boiling when poured over the salt, and allowed to cool until it is agreeable. Then sit in it fifteen minutes before going into bed. Wrap flannel round the limb in bed—next morning rub the leg well with the soap liniment and hartshorn, equal parts: then apply a bandage from toe to knee. The next point is to prevent a return of the swelling. Infusion of Peruvian bark and port wine equal parts, or half a wine-glassful of each should be taken every day at noon. The bowels should be kept regular with gentle medicine, and the diet should be nourishing.—Nothing will give us greater pleasure than to hear of his being cured.

To the News Agents and Readers.—Many of the numbers of the FAMILY DOCTOR being out of print, and not to be had except in the parts we have resolved to bring the first volume to a close with our 26th number; after which we shall begin a new series. Previous to that time we shall have re-printed the numbers wanting, and any one can have sets complete, or the 1st volume complete with our 26th number. The new series will be still further improved, and rendered worthy the unexpected encouragement we have received. The printer had better be informed of the number of copies required by the agents.

TO CORRESPONDENTS.—We shall consider it a favour if all letters, requiring answers on the Saturday, should be forwarded so as to reach us on Tuesday. We will not answer for their insertion, if they reach us on Wednesday, or if they are unpaid; we frequently receive and return them when unpaid.

N.B. Medical Advice will always be given to any person (gratuitously) through the pages of the FAMILY DOCTOR; but it is necessary to give age, sex, employment, symptoms of disease, length of its duration, together with the most probable cause, or at least to describe the commencement of the attack. Any one may have advice through the above medium—viz., *answers to correspondents*, without the necessity of giving their names, or the possibility of their being made known; only, there may be questions which we shall decline answering in our pages, in which cases the patient may correspond with the editor, receiving advice until cured, on payment of 2s. 6d., in stamps, as a fee, in the outset. In all cases direct to the Editor of the FAMILY DOCTOR, 4, York Cottages, St. Mark's-road, Camberwell, New-road, London.

Part 5, of THE FAMILY DOCTOR, *Price 6d., is now ready; and may be ordered from any Bookseller.*